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AN ACCOUNT OF THE DAMARA COUNTRY,

BY THE REV. F. N. KOLBE.

Communicated by the RIGHT HON. EARL GREY, Principal Secretary
of State for the Colonies. Read 15th January 1851.

THAT country on the western coast of Africa, which commences from the twenty-fifth degree of South latitude, and which is generally called Damaraland, is inhabited by a nation divided into two principal tribes, the Ovaherero and Ovampantera. This country is bounded on the west by the Atlantic Ocean: its northern and eastern boundaries, however, are not yet ascertained. The bordering nations to the south are the Great Namaquas and Hill Damaras, which latter is a negro race that speaks the Namaqua language. To the east is a nation called the Ovatjaona: it is this nation that lives on the coast of the newly-discovered lake. There are also tribes residing near this lake which speak a dialect of the Damara language, as we learn from the discoverers of the lake. To the north of the Damara country resides a nation called the Ovampo, a negro race, living in a fertile country, in large villages, and governed by a king. They work in trades, and have agricultural habits. Slaves are exported from amongst them. They have no clicks in their language, and it so much resembles the Damara, that the two nations are able to converse with each other.

To the south Damaraland is hilly: the northern part consists of wide plains covered with thorn-bushes, low shrubs, and grass. All the rivers are periodical: on their banks grow high and thick trees, chiefly of the acacia kind. Compared with Namaqualand the country is well watered. Besides mineral springs, wells are frequently found which are dug by the natives, so that the want of water is not felt in travelling.

The rainy season commences about October, and lasts till March or April. The climate, during the remaining months,

is very agreeable, being clear and bracing, though sometimes piercingly cold in the night.

The country abounds in wild beasts : lions, leopards, rhinoceroses, hyenas, buffalos, giraffes, zebras, guns, koedoes, and other kinds of antelope, are found in great numbers.

The Damaras are a numerous people, being, as we suppose, 40,000 in number. They belong to the Kaffir race. Their appearance, habits, manners, religious ideas, and particularly the similarity of the construction of the two languages, places this fact beyond doubt. They are nomads, and have no agricultural habits, but are very rich in cattle and sheep, on which they almost entirely live. Some of the chiefs possess from 6000 to 8000 head of horned cattle. On account of their few wants, cattle supplying both food and clothes, very little trade is carried on with other nations. Utensils, assagais, and other things made of iron (which is much valued by them), they procure from the Ovampo and from the colony, by means of the Namaquas.

The Damaras are divided into tribes, each tribe being governed by a chief, who again has other inferior chiefs under him, who rule over villages containing from 100 to 400 people. They have no fixed laws; but the chiefs, although they have the power of governing arbitrarily, yet venerate the traditions and customs of their ancestors, so that tyranny is seldom heard of amongst themselves. The names of the richest and most powerful chiefs are, Katjokura, Omungunda, Katjimaha and Kahitzene, which latter is the most influential man among them : he unites with good sense, energy and bravery. He is respected and feared both by the Damaras and Namaquas. The tribes are constantly in a state of enmity with each other, and frequent wars take place between them. In battles between the Namaquas and the Damaras, the latter generally are beaten, for they are not so well provided with fire-arms as their enemies; and also because of their ignorance of conducting a war, and of the disunion of the tribes. Their religion resembles that of the Kaffirs and Bechuanas. They have no clear idea of a Supreme Being. Pointing to the north, they speak of Omukuru as the highest being they know of; but whether he is considered a god, or only as their great ancestor, is uncer-

tain. They practise circumcision, offer sacrifices of beasts, and pray to the shades of the dead. There are many sorcerers and rainmakers amongst them.

About six years ago the Mission among the Damaras was commenced by the Revs. H. Hahn and H. Kleinschmidt, of the Rhenish Society; and this Society has now two stations in that country, New Barmen and Otjimbingue, both situated on the right bank of the Swakop River. The first is presided over by the Rev. H. Hahn, and the other by the Rev. J. Rath. The time has been too short, and the preparatory works (such as acquiring the language, printing books, building, &c.) too many for us, to see much success; but the work is encouraging: some hundreds of people attend the places of public worship, and send their children to the schools. Some of the Damaras are, at least outwardly, much improved, so that we may cherish the hope that the work will become prosperous.

The country lying between the limits of the Colony and Damaraland is inhabited by Namaquas and Hill Damaras. The names of the chiefs are, Abraham, of Nisbeth Bath; William Frazman, Jan Buikes, and Umap, of Fish River; David Christian and Paulus Goliath, of Bethany; Nanip, chief of the Veldschoendragers; Willem Zwarthoi, of Rehoboth; Oasip, chief of the Red Nation; Amraal, of Elephant Fountain; Fredrik William, of Stepmansdorf, at Walwich Bay; Jonker Afrikaner, of Concordiaville. The highest estimate of the number of people governed by these chiefs is 10,000. The country which they inhabit is so waste and barren, and the supply of water so small, that very little intercourse can be held with Damaraland and the Colony. The shortest and easiest communication is by way of Walwich Bay.

(Signed) F. N. KOLBE,

In the service of the Rhenish Missionary Society.

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HOW DID THE NATIVES OF AUSTRALIA
BECOME ACQUAINTED WITH
THE DEMIGODS AND DÆMONIA,
AND WITH THE SUPERSTITIONS OF THE ANCIENT RACES?
AND HOW HAVE MANY ORIENTAL WORDS BEEN INCOR-
PORATED IN THEIR DIALECTS AND LANGUAGES?

Suggested by W. AUGUSTUS MILES, J.P., Commissioner of Police, Sydney ;
Corresponding Member of the Ethnological Society, the Statistical
Society, and the Museum d'Histoire Naturel, Paris.

INTRODUCTORY REMARKS.

IT is not much more than half a century ago since the shores of Port Jackson were unknown to the white man. The beautiful waters of this splendid harbour were thickly studded with the fragile bark canoes of the aborigines; threads of blue smoke, curling among the trees, indicated where tribes and families had encamped in the sheltered and wooded coves; while the joyous shouts and festivity of the wild and savage dance, the corroboree, bespoke the mirth and happiness of the aborigines, especially if they had been successful in hunting or in fishing.

When the English ships entered Port Jackson it was calculated that the natives inhabiting its shores were at least 1500 in number; but now about eight haggard beings, the wretched remnant of this race, emaciated by drunkenness, and at times by hunger, linger out a miserable existence, sleeping in the open air, refusing work, and preferring the erratic life of their forefathers to the comforts of civilization.

Only one man remains of the numerous tribe mentioned by Captain Cook when he explored Botany Bay. This last of his tribe is much attached to the scenes of his younger days. His name is *Maoroo*. He is the son of the former chief, and

feels much his own desolate condition. I was walking on the bright sands of Botany soon after sunrise, when he suddenly appeared from the skirting thickets, and, coming up to me (for we were not new acquaintances)—“This is all my country,” said he, making a large sweep with his extended arm. “Nice country : my father chief long time ago ; now I chief. Water all pretty—sun make it light. When I little fellow, plenty black fellow, plenty gin, plenty picaninny, great corroborree, plenty fight ! Eh ! All gone now ;” and, pointing his fore-finger to the earth, “All gone ! only *me* left to walk about.”

So will it be with other tribes : as the white man advances they will become extinct, and leave no record of their race.

It is a singular feature in the character of the aborigines of Australia that they will not adopt a civilized life, except in some few and very rare instances. Even adults, who have attended expeditions, or been to England, have returned to their tribes, and abandoned the trammels of civilization for the unfettered freedom of the bush. A Swan-River aboriginal, named Miago, accompanied Capt. Stokes in his expedition in H. M. S. “Beagle,” but, on his return, threw away his European costume, and joined his tribe. Collins, in his *History of New South Wales*, vol. ii. p. 34, remarks, that even children who have been reared amongst white people have quitted their comfortable abodes and returned to their savage life.

The Gypsies have the same peculiarity ; and the Abbé Dubois says many families of them could be pointed out who have continued four or five hundred years in particular districts, without approximating in the least to the manners, fashions, or language of the tribes among whom they have been naturalized.”—*White's Hist. of Selb.* p. 187.

I have frequently observed that the half-caste youth in Australia partake much of the Gypsy character in feature and complexion, and are fairer than a half-caste by a negress.

The tribes in the interior have their hunting-grounds or districts well defined : they rove from one locality to another, as seasons may produce various fruits or herbs, or as caprice may lead them : they depend upon each day for their food, and have no idea of productive labour ; a race

Quies, neque mos, neque cultus erat nec jungere tauros
 Alit componere opes norant, aut parcere panto
 Sed rami, atque asper victu venatus alebat.—Æn. 8. 316.

The monotony of their life affords them little to think about. The remembrance of yesterday has passed, and what have they to heed about to-morrow?

The white man has greater enjoyments, but he has greater cares. It is, however, allowed that the fewest cares constitute the greatest happiness.

It is only when population becomes so dense as to cause the possession of land to become limited—when tribes become troublesome and aggressions frequent—that mankind begin to be civilized, owing to the force of circumstances which compel them to herd in numbers for their mutual benefit and protection. The aboriginal population of Australia range over immense tracts of land, so vast that they never can become over-populated or dense in number: they are now what they always have been, and will be till they become extinct, namely, a nomadic race.

It is, however, curious to observe, that although the native of Australia stubbornly refuses to adapt himself to the habits of the white man, yet many tiny birds have instanced more progression in comforts, for they cunningly avail themselves of warmer materials than the forest afforded for their little nests, and, by some observant and instinctive power, have adopted a new and hitherto unknown material for their nidal comforts, as they now avail themselves of horse-hair, cow-hair, and wool, in the construction and linings of their nests.

It is considered by some that the natives of Australia are of one family. There is a great variety in the languages of the tribes, but not greater than among the races of the same superficies of earth in Europe as in Australia. It will be seen in this Paper that peculiar customs and superstitions are known at opposite sides of this island-continent, also similar words. So in Europe, customs, language, and similar words, among different people, can be traced through the length and breadth of its extent, all tending, however, to an Eastern origin.

The most prominent and general characteristic of the aboriginal is the projecting eye-brow, a full but receding eye

of keenest sight, motion and intelligence, nose and nostrils rather flattened, the space between the eyes broad, lips rather thickened, but *not* of the negro caste, chin broad, prominent, and advancing, mouth wide. The lower extremities are sometimes disproportionate to the upper structure of the body, especially among the females, more especially among tribes in contact with masses of white people, as, for instance, among the wretched fragment of the Sydney tribe, bespeaking a melancholy retrogression or decadence of the race. The most striking peculiarity among some of the aborigines is the dental arrangement, a peculiarity which might tend to shew an early herbivorous race of which they may be a remnant. In many instances the incisors are inclined to be round; and Mr. Archibald M'Leod, of Gipp's Land, informs me, that among the tribes in his vicinity the incisors are more like the bicus-pates. But it is not only in the living man that this peculiarity exists, for it is found among the dead of races which have long since passed away. Mummies have been discovered with similar incisors, and, I believe, among the Guanches. Dr. Land, the Danish naturalist, has found the same arrangement of teeth among remains of ancient races mixed up with the *débris* of animal bones at Minas Geraes in the Brazils, having the incisors and the molars perfectly alike. Even some of the ancient races in Great Britain may be considered to have had a similar arrangement. Human remains of great antiquity have been discovered also, mixed with animal remains, at Kent's cavern, near Torquay, also in an ancient skull discovered in Berkshire: the incisors were flat like double teeth. (See *Journal of Arch. Assoc.* vol. vi. p. 173.)

Mr. Eyre, in his Expedition over the south-west portion of Australia—wild tracks, where no white foot had been—observes, that in many blacks no difference existed between the incisor and the canine.

The earliest accounts state that the primitive Egyptians, before the arrival of Mene, lived upon the herb agrostis. (See Bryant *Myth.* vol. iv. p. 298.) So the Australian natives in the interior live upon grass seeds, roots, and ferns. It appears that races have existed with teeth similar to the aborigines of this country.

It will admit of much doubt if the Australian tribes are of one family. It is most probable that at some period (too remote for chronology) there might have been an admixture with other races, at once numerous, powerful and commercial, who had visited these shores, and may have taken to northern regions that rare bird called the black swan, whose existence is not doubted, though its rarity is asserted.

Sir Thomas Mitchell found a tribe in the interior with a Jewish caste of countenance. Capt. Hunter, in his History of New South Wales in 1788, pp. 415, 642, states that he saw native women in Port Jackson as light as mulattos; and one woman, he observes, was of a bright copper colour, with pleasing features, and that kind of turn that, had she been in any European settlement, no one would have doubted her being a mulatto Jewess.

Mackenzie, in his Vocabulary of the Perth dialect, says some faces are quite Asiatic. (See "Myn-it.")

It has been asserted that the Australian aboriginal is the lowest of the human races; that he is the link between the human and the brute species; that he is more degraded than the generality of mankind, and little better than the monkey.

The tribes near the coast are mostly ichthyophagi: their hours are passed in their canoes, catching or spearing fish, sitting in cramped positions: then, having caught their food, they paddle to the shore, light a small fire, throw the fish upon it, give the entrails to their dogs and a portion to their females; then, having gorged, the savage sleeps till hunger again urges him to seek for food. The unvaried food and the cramped position might produce the slender and attenuated appearance of these fish-eating tribes; but the inhabitant of the forest is a fine specimen, and retrieves his race from the imputed proximity to the monkey tribe.

Mr. Eyre describes the natives in the upper districts of the Murray as men with fine, broad, deep chests, indicating great bodily strength, remarkably tall and erect in their carriage, with much natural grace and dignity of demeanor. The eye is generally large, black, and expressive, with long eye-lashes.

The Rev. D. Mackenzie, in his remarks on the natives in Western Australia, states that they are more active and sinewy,

than strong and muscular. They are well formed, broad in the chest, though generally slender in the limbs. (See *Emigrant Guide*; in *verb*. "Mammäräp.")

My friend Dr. Leichardt was among the natives north-west of Moreton Bay when, the fruit of the lofty bunya-bunya tree being ripe, there was a large annual assemblage of tribes far and near to participate in the feast, settle grievances, indulge in fights and the mystic dance of the corroboree. The enterprising Leichardt says—"The proportions of the body in the women and the men are as perfect as those of the Caucasian race, and the artist would find an inexhaustible source of observation and study among the black tribes." Again, we have the evidence of Count Strelescki, who remarks, that "when the native is beheld in the posture of striking or throwing his spear, his attitude leaves nothing to be desired in point of manly grace."

The Australian appears to excel many races of the human species in manliness, stature, and intelligence. He is superior to the Boshman of Africa, to the Bedahs of Ceylon, or the stunted races of Esquimaux and Greenlanders. The assertion as to this race being the link in the lower animal life appears to be incorrect, though, upon further investigation, it might prove to be the link of some of the most early and the present existing races of mankind.

The aborigines of Egypt lived chiefly upon vegetables; they sheltered themselves under sheds of mean workmanship, which they thatched with the flags of the Nile. In process of time they began to feed upon the fish which the same stream afforded, and were clothed with the skins of beasts. (See Bryant's *Myth*. vol. iv. p. 298.) Such is the present condition of the aborigines in Australia: they are now in the same position as the primitive Egyptians upwards of 3600 years ago, yet they retain superstitions of the earliest date; but when, how, or by what races oriental myths and words were brought here, is hitherto unknown, and the fact has only been recently discovered.

My attention was first called to this subject when I heard the aged widow of a former chief say, "Murra, nâo-wi," as she pointed to H. M. S. "Fly" as she opened the heads of

Port Jackson. "Birri nao," in Sanscrit, is a big ship. She called writing "Gulum-a." "Gulum" is an oriental word, signifying a reed or pen. Yet these people have no alphabet: they could never navigate, and yet the word "nao" is an ancient word, known in all times and in most languages—in Greek, Latin, Gaelic, Sanscrit (नौ *nau*), Persian (نَؤ).

When America was first discovered that land was considered as recently inhabited, till explorers found immense earthworks, camps, and ruins of cities, in wilderness and forest untraversed even by the Indian huntsman; but there stood the solitary and mysterious ruins, telling of races and nations long since passed away, and the ruin is the only record.

Some wells and some earthworks have been found in Australia, but no traces of ruins. These earth-works were for purposes of irrigation, and evidently indicate a higher state than that of the present race. Concerning these earthworks, Mr. Protector Robinson, in his letter relative to the Aborigines, printed for the House of Commons, Aug. 1844, p. 240, says, "the trenches resembled more the works of *civilized men* than of *savage men*. They were of considerable extent. One continuous triple line measured five hundred yards in length, two feet in width, and eighteen inches to two feet in depth. These extensive triple dykes lead to extensive ramified water-courses. * * * * Thousands of yards had been accomplished. The mountain streams had been made to pass through them.

This system of irrigation was known in early times to the Indo-Scythians, and was introduced by them into Egypt. It also appears to have been at some time introduced here.

Relative to the wells, Mr Eyre (vol. i. p. 209) mentions he saw one called "Beel-im Gaippe." "Gaippe" means water, (बल *ap*, "water,") and the waters of this well may, in reference to the Baal superstitions, be the "waters of the *Baal gods*." The Baal is a demon known under the name of "Boyl-ya" in South Australia, and much dreaded by the natives.

The entrance to this well was by a circular opening through a solid sheet of limestone: it was about fifteen inches in diameter, but enlarging a little about a foot below the surface. The water was at a depth of ten feet. He also found a cir-

cular hollow in a limestone rock, twelve feet in diameter, and upwards of twenty feet deep. (See p. 215 same vol.; also Capt. Sturt, lat. $26^{\circ} 15'$, long. $138^{\circ} 48'$, found a well twenty-two feet deep and eight feet broad.

The discovery of these wells and earthworks may not prove that the present races are descended from those who constructed these works. The inhabitants of the Ohio, the Mississippi, and the Guatemala regions are not known to be descended from those populous and civilized people who constructed vast earthworks, erected strange and wondrous palaces, temples, and pillars elaborately carved, now telling in their silent magnificence and grandeur of the noise and tumult of a former population, gone, unknown, and even lost to tradition.

The Australian native has no settled industrial pursuit; it is not in his nature. In the rural districts he may work a while, but soon he goes to the bush again: the dull monotony of a civilized life is irksome to him; he enjoys the pleasures of the hunt for kangaroo or for opossum: so the white man seeks the fox or the hare: the forest is the native's home.

In the thickly populated districts, where pasturage and tillage forbid encroachment, the rovers of the bush are deprived of their hunting-grounds, they become paupers on their former territories, and the vices of civilization brutalize the savage, and ultimernately destroy his race.

It is a singular feature in the native character that they will not learn a trade, and therefore no trace would exist of cultivated races. If we could suppose that the white man should ever abandon this colony, then, in the lapse of a century or two, every vestige of him would be lost.

The boomerang is an implement for hunting peculiar to this colony; it is unknown elsewhere: and yet, in an Egyptian fresco, a person is represented hunting water-fowl, and bringing down his game by means of the boomerang. (See Wilkinson's "Egypt.")

From the foregoing remarks it might appear that the races of Australia have been in communication with the most early races indeed, mentioned by Homer as legendary, active, powerful, and enterprising people, who carried conquest,

commerce, and civilization over the world, and whose traces may be in the ruins of Yucatan, Palengue, or Peru.

The subsequent observations will treat

Of Demigods and Dæmonia.

Of Superstitions.

Of Languages.

The comparison of the ancient with the present Australian myths and languages may be of interest to the Ethnologist on a subject to which I have paid much attention in working out, and in which I regret the want of references at the antipodes.

DEMIGODS AND DÆMONIA.

The worship of Baal was the most extended, and ranks among the most ancient superstitions. One of the avatars of Vishnu is *Bal-liga* (Moore's "Hind. Panth.," pl. 97); and one of the most ancient and sacred spots in the Carnatic is *Maha-Bali-puram*, the city of the great Baal (see Southey's "Curse of Kehama"). Many names of places in Ireland have reference to Baal; and at one of them is a round tower, whereat crowds of people assemble at a season of the year to perform certain ceremonies, and conclude with feasting and dancing.

In the south-eastern seas there is the island of *Bali*, and thousands of human victims are annually sacrificed by the priests to the sanguinary Baal.

In ancient times the summits of hills were dedicated to deities whose names had been forgotten, but were still held sacred

"Hoc nemus, hunc inquit, frondoso vertice collem
Quis Deus incertum est, habitat Deus."

Æn. VIII. 351.

It was on the summits of high lands that the rites of Baal were performed; and even to this day the fires of Baal are lighted upon the hill-tops in Ireland.

In Australia, along the eastern portion, if not in other parts, the summit of a mountain or bluff of a projecting promontory,

is called *Bool-ga*.* Bryant, in his work on ancient mythology, observes, that, in the earliest language, "*Ca*" implies a spot or temple, whence "*Ka*" in Sanscrit and "*Ko-kerre*" in Australian, "a house or dwelling-place"; and to this root may be traced "*Ca-strum*," "*Caer*." Thus the word "*Bool-ga*" may be "the spot (the "*Ca*") sacred to Baal."

"*Baal-Baal*" is the native name of a place on the Murray, and among a portion of the Goulburn tribe the native name for fire is "*Baal*."

The tribes on the Loddon River have a tradition of the supposed existence of a being possessing attributes of a deity, and he is named "*Bin-Beal*."

The "*Baal*" was the sun worship, and it appears to have been practised among the natives of Port Jackson when they were first discovered in 1788. "The natives sing a hymn or song of praise from day-break till sunrise." (See Hunter's "*New South Wales*," p. 372.)

Among some of the southern tribes the body of the deceased is placed in a canoe (see Angas' "*Savage Scenes and Life*"). At the Hindoo festival, the *Doorgah*, a mystical canoe forms part of the procession, and it is named "*Boyl-ya*." The canoe also appears blended with the Egyptian myths.

The "*Boyl-ya*" or Baal superstitions, exist in Australia, but especially on the western coast. Governor Grey, in his valuable and interesting *Vocabulary of the Swan-River district*, gives ample proof of this singular fact, and I quote his words:—

"*BOYL-YA*," a sorcerer, the black witch of Scotland, a certain power of witchcraft."

"*Boyl-ya-gaduk*, one 'possessing the power of *Boyl*' (or Baal; a priest of Baal, I should say). These people can transport themselves into the air at pleasure. They can render themselves invisible to all but other *Boyl-ya-gaduks*. If they have a dislike to a native they can kill him by stealing on him at night and consuming his flesh. All natural illness is attributed to these *Boyl-ya-gaduk*."

* "Upon the top of the mountain the whole limit thereof round about shall be most holy.—*Ezek. xliii. 12*."

Stokes, in his "Narrative of the Beagle," vol. i. p. 81, also mentions the *Boyl-ya*.

The words "*Biule*," "*Boyal*," or "*Bieul*" (or *Baal*), are used among the south-western Australian dialects, but the exact meaning has not been precisely ascertained. It is, however, supposed to signify the "west." (See Grey's Vocabulary.)

May not this refer to some old traditions as to the direction or quarter from whence those strangers came who imported the mysteries of the *Baal* (the *Boyl*) worship, and who appeared to the natives as if rising from the western horizon? The Christian places his altar to the east, and the *Baal* deity might have come from the west.

Some of the Eastern tribes also consider themselves to be under the influence of this mysterious *Boyl* or *Baal*. If any questions are asked concerning him, the natives are very shy in giving any information. He is evidently a being held in great dread, for they shake their heads very mysteriously, and place their hands before their mouths.

Sabaism, and the custom of human sacrifices, still linger among the Australian tribes, relics of the *Baal* worship, and of Cuthite origin (see Bryant's "Mythology"). The natives reverence the two principal stars in Orion. They are supposed to have been hunters, and the Pleiades to have been young girls, similar to the Greek mythology. They consider the moon to have been a black man named "*Taorong*," and the sun, "*Gnoah*," or "*Koen*," to be his wife: and here we find the mythraic superstition, for the sun is said monthly to slay her husband, the moon, and that, in dying, he revives again.

The mysteries of the mythraic worship were performed in caves: the strictest silence was enforced; and there are caves in Australia now held in great terror. Moreover, if a white man should whistle, shout, or sing in a cave or any hollow in a rock, the natives will rush from under it in the greatest alarm, fearing that the superincumbent mass would fall and crush them.

If a native, when travelling, fears that the sun will set before he can reach his camp, he propitiates the luminary, his *Baal*,

by placing a lighted stick in the fork of a tree facing the sun, in order to check its speed, and then, under full conviction that the spell is certain, he betakes himself to his heels. This is a frequent custom.

In reference to the rites of Baal, marked as they were by blood and human sacrifice, the word "*Bal-ligan*" among the Swan-River tribes is the infinitive mood of the verb "to slay."

There is another mysterious being held in dread and terror by the natives, namely, the "*Koen*." He is known north-west of Moreton Bay, also at Adelaide and Swan River; but he is also known to the Chinese as the deity "*Kuan-yid*," and, I believe, to the Bedas or Vedahs, the aboriginal race at Ceylon. Among the eastern tribes of Australia "*Koen*" is one of the names of the sun.

"*Koen*" was also an Egyptian deity: his name appears in the hieroglyphics nearly as it is now pronounced by the natives: "*Khōn*" or "*Guhon*" ultimately became borrowed by the Greeks (*Kvov*). There is an historical tablet in the ruins south-east of Carnac, Thebes, epoch uncertain, and in the fifteenth line is a passage commencing, "I, the god '*Khrons*,' consent" (see Gliddon's "*Ancient Egypt*," New York, p. 25). This author further remarks that "*Khnum*" (radix *Khn*) implied, or was a term for, "*Amon*," the Creator, in the most ancient Egyptian.

"*Cohen*" is the Hebrew word for priest. It was also the Egyptian word for ruler, as well as priest. The radix "*Khn*" in the ancient Egyptian is found in the Persian word خان "*Khan*," a nobleman or lord. Referable to the word "*Koen*" is the German title "*Kön-ig*," and "*King*" in English.

Thus it appears that the savages of Australia and the most civilized of the Caucasian races are still under the mysterious influence and power of "*Koen*," "*Kön-ig*" or "*King*."

The term "*Koen*," according to Bryant ("*Ancient Mythology*"), became, in the course of time, annexed to *all* persons of *prophetical* or *sacred character*. Thus the term "*sacred*" is to this very day applied to majesty—or *King*, *König*, or *Koen*.

"There's such divinity doth hedge a king."

This very ancient and mysterious personage is now a

dreaded monster, of an evil disposition and a prophetic character, among the tribes on the eastern and southern coast of Australia: he is also blended with funereal rites and ceremonies.

The Rev. and worthy Mr. Threlkeld, in his grammar of the language of the tribes at Lake Macquarrie and on the Hunter river, says, that "*Koen* is an imaginary being, in appearance like a black fellow with an immense abdomen, and painted over with white clay, carrying a fire-stick in his hand." He is believed to steal upon the natives when they are asleep in the woods, that he seizes upon them with immense talons, then, clearing the forest at one bound, he soars with his victim into the air, and consumes him at his leisure. As a prophetic character he is said to precede the arrival of other tribes from distant parts, when they assemble to celebrate their mysteries. But the presence of the "*Koen*" can only be detected by the magicians or doctors of the tribe, similar to the "*Boyl-ya-gaduk*" previously mentioned in reference to the Baal worship.

The Adelaide tribes believe in "*Kuin-yo*:" he is similar in shape and complexion to the "*Koen*" on the eastern coast. As a prophetic being it is believed that his presence will cause the death of some individual. Hence "*kuin-yo*" is a term signifying death, as "*kain-bil*" has the same meaning at Swan-River; but "*kyn-ya*" there signifies the soul. The word enters into composition in many words alluding, as Bryant observes, "to a sacred or prophetic character."

"*Kuin-yunda*," mortiferous, lethal, forbidden, sacred.

"*Kuiny-undappendi*," to hold sacred or forbidden.

An inquest or inquiry is held upon almost every deceased person among the Adelaide tribes when the cause of death is not very apparent. The corpse is placed upon a bier, "*kuin-yo-wirri*," and carried round the localities where the deceased had been living. One person is continually asking, "Has any person killed you when you were sleeping? Do you know him?" If the corpse denies it, then they proceed further: if it gives an affirmative, the inquest is then continued there. It is believed that the affirmative is given when the

corpse is moved round, which motion is said to be produced by the body itself, influenced by "kuin-yo," who is hovering over the bier. (In the Egyptian paintings a spirit is represented hovering over a corpse stretched upon a bier.) If the murderer is present, the bier is said to carry itself against him, so that some of the branches on which the corpse is laid may touch him, and then a fight ensues. (See Teichellmann's Vocabulary, p. 12.)

Dr. Lang, in his "Cooksland," p. 427, mentions a similar custom to prevail among the natives north of Moreton Bay.

At the funeral of a Jew, the priest—the Cohen—is not permitted to come within a prescribed distance from the corpse.

It will appear that the superstitions connected with an ancient deity of the Brahmins*, and which extended westward so as to be a tutelary god of the Germans, is traceable among these races, namely, the radix *MN*, mentioned by the Chevalier Bunsen, forming the "Menu" of the Hindoos, the *Menes* of the Egyptians, the *Min-os*, the *Min-otaur*, the *Min-erva* of mythology, and the *Man-nus* of the Germans.

Bryant ("Ancient Mythology," vol. iii.) states that the people who were called *Min-yæ* were Arkites, and worshipers of the lunar deity "*Menes*:" he further states, producing his authorities, that a race of *Min-yæ* inhabited the shores of the Red Sea; and, in vol. iv. p. 6, he decides that the *Min-yæ* were a branch of the Cuthite branches—the Indo-Scythians.

Enough may have been already shewn, in reference to the Baal mysteries, to direct the attention to a Cuthite visitation to these shores at some very early and remote period; and it may well be a matter of surprise and speculation how these superstitions have so long existed, and survived the usual wrecks produced by time. Yet we find in England and Ireland, and, I believe, in Scotland, that the Baal worship has left some relics, some joyous festivals among the people, and

* The *Menes* (मनस्) *Menes*, "the mind." In Chinese *men-g* refers to splendour, refulgency, brightness.

I am indebted to my friend, Surgeon Bellott, R.N., for the above observation concerning the Chinese word, and he will append a note on this subject.

that the mysterious "koen" is on the thrones of the civilized world as well as in the wilderness of Australia.

The ancient "Menes" does not, however, hold so prominent a position among the Australian tribes as the Baal and Koen, yet there is sufficient proof to shew that the Cuthites had imported the superstitions.

The tribes near Port Philip call the moon "*Meni-yan*." According to Bryant, "meen" was one of the ancient names of the moon (*undè* "moon"), so known to the Cuthites or Arkites; and it is a singular fact that these *early races considered the moon to be a male, the same precisely as the belief of the present Australian*.

This singular deflection from the usual course of mythology is noticed by Harcourt ("On the Deluge," vol. i. p. 134), when he states, that in the Tainay dialect of the Siamese the moon implies the sun. But it is a singular circumstance that this deflection exists among the Australian tribes; as, for instance, the word "piki" among the Adelaide (the southern) tribes means the moon; but among the Moreton-Bay tribes (north-east portion of Australia) "piki" means the sun. Then again, among the eastern-coast tribes "koen" is one of the names of the sun, but on the Bogan River, in the interior, the same word implies the moon.

But to return to the "Menes," or the radix *MN*, in reference to mysteries, &c. &c.

On the Loddon River the tribes have a superstitious dread of the "min-dye," a huge serpent, endued with supernatural powers, possessing the power of inflicting disease or death when duly invoked by incantation. He is also supposed to produce gales and hurricanes by the lashings of his enormous tail. This will be again referred to under the subject of superstitions in reference to ophic worship.

Among the Murray-River tribes a net, during sickness, is worn as a charm round the waist, and it is called "*min-tum*." The sorcerers are called "*min-tappa*." (See Angas, vol. i. p. 93.)

At Port Jackson the natives believed in a spirit named "mawn." (See Tench's "Port Jackson," p. 106.) They would not touch a corpse, believing that the "mawn" would seize and fasten upon them in the night.

The following interesting paper, from the able pen of Mr. Assistant Protector Parker, on the manners, customs, and traditions of the aborigines in the Loddon-River districts, appeared in the "Port-Phillip Herald," and is worthy of consideration:—

"Many erroneous opinions have been entertained respecting the character and habits of the aborigines of Australia, and it has been commonly asserted that they are totally destitute of any notions worthy of the name of religious opinions. In the earlier period of my acquaintance with them I entertained similar views; but further communication has induced a conviction that a traditional mythology exists among them, rude and obscure indeed, but in all probability the indistinct relics of some older and more complete system. It must be sufficiently obvious to all who have had much intercourse with the native tribes, that they are exceedingly reluctant to speak on these subjects; a circumstance readily accounted for by the fact, that whatever notions they entertain of supernatural beings, all refer to objects of fear and dread, and not of love. The older natives can scarcely be brought at all to speak about their traditions, but from the young men I have latterly obtained some more definite information than I formerly possessed, which appears to me of sufficient interest to become matter of record.

"I have long been convinced, that in addition to a general notion of the existence of an immaterial principle in man, which survives the body, the aborigines entertained opinions bearing a rude analogy to the metempsychosis of the oriental mythologies. They have cherished the idea that the souls of their deceased friends pass into the bodies of certain species of birds. How long this is supposed to continue, and what may be the result of the change, they are either unable or unwilling to tell. The belief also has been very general that the whites who have occupied their country were formerly 'black fellows,' who have passed into a new and highly-improved state of existence. It is remarkable that the designation given to the white inhabitant of the colony in most of the dialects of which I have heard, (amydeet, jajowrong, amerjig, koligan, amy gai, &c.,) appears to be identical with the words used to

describe the soul when separated from the body. I once, and but once, saw a singular ceremonious dance on the Loddon station, which was called "Yapéne amy gai," or dance of separate spirits. It was avowedly a novel affair to nearly all the actors, and was taught by an old man from the westward, since dead. In this ceremony, after a very singular and not unpleasing dance with branches in either hand, all, with the exception of the two old men who were leaders, came together to one spot, and gradually bent towards the ground, becoming slower and slower in their motions, till they were entirely prostrate. They remained perfectly motionless for some time, and a mournful chant was sung over them, and they were said to be 'dead.' The two old men then went round them several times, and seemed to be driving something away with their boughs, singing at the same time with increasing energy till they became very loud and rapid. Then, at a given signal, they all sprang to their feet, and recommenced their dance. They were then said to be 'alive.'

"I have made inquiries to ascertain whether any notion of a superior power or deity existed among the tribes with which I am in communication. I think I have found a distinct tradition of the supposed existence of a being possessing some of the attributes of a deity. The name of this imaginary being is *Binbeal*. They assign to him the making of an original pair, from whom has descended the present race of man. There is evidently much vagueness and obscurity in their notions on this particular topic. But they are more distinct in their representation of the relation he is to bear to them after death. He is said to take the spirits of deceased natives and subject them to a sort of purgatory, placing them in fire to try them whether good or bad; the good are at once liberated, but the bad are made to suffer for an indefinite time. They have sometimes replied to my inquiry 'who made all things?' &c., 'Binbeal,' but the reply is given in a doubtful and hesitating manner, and it is a frequent acknowledgment with them that they are 'very stupid,' and know little about the great facts of creation and Providence.

"Other traditions exist among them referring to the origin of certain natural objects. Thus they believe in the existence of

another mythological being called Bonjil or Pundyil, who, however, is said to have been once a 'black fellow,' and a remarkable locality is inditicated as his residence when on earth. This is the deep basaltic glen or hollow, forming the fall of 'Lallal' on the Marabool, near Mr. Airey's station. He is now represented as dwelling in the sky, and it is curious that they call the planet Jupiter 'Pundyil,' and say it is the light of his fire. This Pundyil is said to have found a single kangaroo, emu, and other animals on earth; that he caught them, cut them up, and, by some mysterious power, made each piece into a new kangaroo, &c., and that hence the country was filled with these animals.

"Another tradition professes to account for the origin of the Pyrennees, Mameloid Hills, and the neighbouring heights. It is ridiculous enough in its details, but supposes them all to have originated in a single immense mountain, which was torn to pieces by the action of fire. The volcanic character of the district may seem to suggest the source of this notion.

"Of all the objects included in their rude and savage superstitions, none appear to exercise more influence on the native mind than the fear of the *Mindyë*. They apply this term to a large species of serpent, which is universally asserted by the natives to exist in the hitherto unexplored country between Mitchell's Outward Line and the Murray. The object of dread, however, is a supernatural being, having the form of the animal just named. This being is represented as having the power of inflicting disease and death when invoked by incantations. The existence of any epidemic or endemic disease is always ascribed to its influence. It is remarkable that the small-pox, which, from the accounts given by the natives, must at times have proved a terrific scourge to them, is called '*Monola Mindyë*,' or the dust of the *Mindyë*; and the scars left by it '*Lillipook Mindyë*,' or scales of the *Mindyë*. The whirlwinds, which in the summer season carry up columns of dust to a great height, are much dreaded by the aborigines. To be included in the vortex of one is regarded as a sign of speedy death, because it is said to be an indication of the presence of the *Mindyë*; it is, in fact, called 'its tail.' The men who are regarded as magicians or conjurors profess to derive

their power from some pretended communication with this object. Although there seems to be nothing deserving the name of a regular religious rite among them, I am disposed to think that some peculiar ceremonies which have been observed within the last two years are intended to propitiate this dreaded phantom, and to avert the consequences of its anger. And I think in their ceremonies and superstitions may be traced the obscure and nearly obliterated relics of the ancient *ophylatria*, or serpent worship, still extant in India and Africa.

"I am fully convinced that these wretched superstitions have far less hold upon the minds of the younger part of the aboriginal population than on the middle-aged and elderly people. Some of the young men openly ridicule their notions; and it is remarkable how very few attempt to question the truth of what is stated to them on religious topics. Their traditionary superstitions are too dim and indefinite to give the mind much pre-occupation, and the estimate which they have formed of the superior knowledge of the whites predisposes them to listen, at least with respect, to what may be inculcated.

"I have thus briefly sketched a few of the traditionary superstitions of the aborigines. I do not, however, profess to give this as a complete delineation of the subject. Other details have been given to me, but the information I have received is not yet sufficient to communicate. I have little doubt that more extended acquaintance with their language and opinions, and increasing confidence on their part, will elicit many interesting circumstances in connection with their history and associations."

SUPERSTITIONS.

Transmigration.

The belief in resuscitation and transmigration, the metempsychosis of olden times, is common in every tribe among the Australians.

The druid bard, Taliessin, who is buried between Machynlleth and Abersytwth, says, in one of the ancient triads, "I

have died, I have revived; a second time I was formed; I have been a salmon, a dog, a stag; I am now *Taliessin*."

The natives of Australia believed that after death they became stars or whales, birds or animals; but now they believe that after death they return to earth as white men. A native who was executed at Melbourne consoled himself by saying, "Never mind, I jump up white fellow: plenty sixpence."

At Swan River the word "djanga" means "the dead;" but it is a word indiscriminately applied to Europeans, who are supposed to have been deceased aborigines, and now revisit the land of their nativity in another colour. Governor Grey and his party were exploring some of the north-western country, accompanied by some natives, and they seriously and earnestly inquired if they were not all of them dead men!

Mr. Hull, the author of "Remarks on the aboriginal natives," informs me, in a letter, that in the mountain districts of Port Philip there is a bird of the wagtail tribe which hovers about on sunny mornings, looking, in the brightness of the day, more like an immense butterfly than a tiny bird: the natives hold them in great reverence, believing them to have been black men who died "plenty good," and hope, after death, to become one of these happy birds. This bird utters a faint cry of "beron, beron," which is the native term for the generative organs.

At Lake Macquarrie on the eastern coast it is believed that old men become flying foxes, and that women become small birds of the woodpecker kind: to kill either would be a great offence to the natives. They also occasionally burn the dead in order to feed and propitiate the eagle-hawk, which they suppose to be animated by the departed spirits of their countrymen. These tribes believe that the world was created by the diamond-tailed eagle, and that he brought in his beak, and deposited, the stones which form the mystic stone circles on many of the hill tops.*

In the Port Philip district a white hawk, white crow, and white crane are especially revered; and in Gippsland

* I am indebted for this information to the Rev. L. Threlkeld.

there is a rare bird, a white cockatoo with a mottled breast, which is held in the greatest superstitious dread by the natives.

Mr. Hull, in his interesting, unpretending work, p. 11, observes, "When the first settlers arrived at Adelaide the natives believed that they recognised their ancestors returned from 'pindye,' the habitations of the dead." [I must here observe that "pindye" implies a European, the same as "Djanga," (the dead,) means a European at Swan River.] "The 'pindye' is the place of souls in the far west, whence the souls of the unborn come, and, hovering among the grass-trees, wait for the hour of conception, to enter a human body, and, after death and burial, to return there again : if unburied, the spirit is supposed to wander an indefinite time, miserable and alone. What a remarkable coincidence," remarks the worthy compiler, "with the opinions of the ancient nations!"

Among the Swan-River tribes the spirit is supposed to go far away in the west to the island of souls. (See Rev. D. Mackenzie's "Emigrant's Guide," in verb. "Netengar.") The Naowe tribe, according to Angas, believe that their ghosts depart and people the islands in Spencer's Gulf.

There is an Irish superstition relative to a temporary future state, which taught a return to a terrene existence after a lapse of years. The peasantry believe moths and butterflies to be embodiments of the souls of their departed relatives. Their elysium was in an island said to be situated off the western coast of Ireland. (Hall's "Ireland," vol. i. p. 394.)

The gypsies, in whose language are many Sanscrit words, believe in metempsychosis like other Buddhists. They say it is useless to execute them or hang them, as they cannot die. They believe, however much the soul may wander, they will rejoin their friends at last. (Borrow's "Gypsies," vol. ii. p. 91.)

Whether we refer to the most ancient and sacred Hindoo works, *i. e.* the "Baghaveeta;" whether we refer to Egyptian or classical mythology; whether we examine the belief of men of all periods and of all countries up to the present date, we find that the poor desolate savage in the wilderness of Australia shares, in common with the rest of his species,

the sublime and imposing conviction of the immortality of the soul.

Stone Circles.

The Australian tribes are very reserved as to their customs and superstitions. There are many ceremonies to which a white man is not admitted, and also many from which the native women are most carefully excluded. The squatters in the interior have enough to employ their time, even if they had studied the subject of early customs and superstitions so as to detect analogies ; and the ignorant stockman can learn nothing from tribes whom he despises and fears.

It is, however, a fact, and a curious one, that the mystic stone circle is known in Australia, at least in some of the eastern portions. The Rev. L. Threlkeld informs me that he has seen them on the very summits of the mountains at Lake Macquarrie ; and the legend is, that they were brought there by the eagle-hawk, a bird of mysterious omen, and much revered by the blacks.

Mr. Alfred Denison informed me that these circles are, in the Paterson district, confirmed also by Mr. Commissioner Fry, who has seen them, and considers them to be *aërolites*, no similar stone being known in the district. The circles are not above twenty feet in diameter : the stones are seldom more than a foot above the ground, and in the centre is an upright stone about three feet high. The natives are very tenacious of any of these stones being moved, especially the centre one. The only reply the blacks make to any inquiry on this subject, and on which they are loth to speak, is, "Don't know : black fellow make it so long time ago."

A writer on Irish superstitions, quoted by J. Harcourt, vol. i. p. 65, states, that an old man, when questioned about certain ancient customs, gave a similar answer to the Australian, for the old man said his ancestors always did it.

Capt. Hunter, in his work "*New South Wales*," 1788, states, p. 46, that he went from Port Jackson on a visit to the unfortunate La Perouse, then at Botany Bay, and, "walking on the north shore of the bay with some of the officers, they

shewed him a little mount which they had discovered, and thought a curiosity." He says, "It was quite rocky on the top: the stones were all standing perpendicularly on their ends, and were in long but narrow pieces; some of them three, four, or five sides, exactly (in miniature) resembling the Giant's Causeway in the north of Ireland."

It is very probable that other stone circles may be in different parts of Australia, but have not yet attracted any notice. •

Circumcision.

Circumcision has been recently found to prevail in some parts of Australia, but as hitherto only observed among tribes on the coast, as if it had been an imported custom by some early navigators. It is practised on the western side of the Gulf of Carpentaria (Leichardt), in the Australian Bight (Eyre), and at Adelaide (Stoke's "Narr. of H.M.S. Beagle," vol. ii. p. 10.) Teichelmann, in his vocabulary of the dialect, states that there are words of contempt and reproach for the neglect of this custom.—See the word "Munno."

The Adelaide tribes say that the ceremony was introduced to their forefathers by "Yurra," an immense snake and imaginary being residing in the skies in a large river called "Wodli Purri," i. e. the Milky Way. "Wodli" means habitation or residence; "Yurra" is said to punish those who neglect the rites of circumcision.

Mr. Hull, of Port Philip, informs me that Mr. Protector Robinson has seen the natives at Port Lincoln, in addition to circumcision, on a particular occasion take one of the tribe, and make a deep incision from the pubes to the navel as a sacrificial rite. Mr. Hull then refers me to Stephen's "Oriental Mythologies," p. 11, stating that the same ideas prevailed in Egypt and Arabia.

Mr. Hull, in his interesting remarks, p. 16, gives an account of the ceremony on such occasions, which is performed when the boys arrive at the age of puberty. He says that a line is drawn on the earth; upon one side stands an old man, who represents the star of autumn, and on the other side one who is said to be "Tappo," the *fly*. He refers to "Oliver's Freemasonry," p. 79, and Tomlin's "Hist. of the Jews," p. 465.

This fly is a curious relic of superstition, for Baal, or Boylya as he is called here, was known and worshipped by the Egyptians and Phœnicians as "*Baal Zebub*," (the supreme Lord of Flies); and the *Baal* is sometimes represented as a fly. (See Hull, p. 17, who refers to Oliver's "Antiquity of Masonry," p. 227, and Tomlins on the Jews, p. 897.)

Raised Scars.

Raised scars are common among all the tribes of Australia, but they do not "tattoo" the body.

The natives in the district of Port Essington have no scars upon their *backs*; and when Leichardt came among them with his blacks (natives of the eastern coast) they were much astonished on discovering scars on their backs, which the Essington natives pointed out to each other with much surprise and earnestness of manner. Dr. Lang, in his "*Cooksland*," p. 363, says that raised scars upon the flesh is a practice at Tayovan or Formosa, and also among the women in Decan.

It was a custom of the highest antiquity known to the Jews, and prohibited:—"Ye shall not make any cutting in your flesh."—Leviticus, xix. 28.

The natives of Darfur and Upper Egypt have three deep cuts on each cheek. ("*Wanderings of Holthans*.")

Piercing of the nose.—Deprivation of finger joint.

The custom of piercing the septum naris is an oriental custom of the present day. It is practised at the island of Tauna, and also obtains very generally among the Australian tribes inland and coastwise.

It appears to be a custom as common as making raised scars upon the body.

The natives of Senaar, Darfur, and Upper Egypt, place a bit of wood in the cartilage of the nose, so that the orifice may remain open for the ornament of an ivory ring. ("*Wanderings of Holthans*.")

The native women, when children, are deprived of the first joint of the little finger: this is done by ligature.

This custom was noticed by Capt. Stokes (vol. i. p. 93) at Baskerville and Beagle Bay; Cooke observed it at the Sandwich Islands; and it is said to obtain among the Hottentots.

Deprivation of a front tooth.

A grand ceremony is performed when the youths who have arrived at the age of puberty are to be admitted among the warriors. Among other rites is the custom of depriving the boy of an upper incisor. It is a general custom, but was not observed at Darwin, nor at Cape Villaret (see Stokes' "*Beagle*," vol. ii. p. 9, and vol. i. p. 72); but on the north-west coast, between Roebuck Bay and Port George IV., many natives had lost *two* upper incisors. (Ib. vol. i. p. 89.)

For an account of this ceremony see Collins' "*N. S. Wales*."

This appears to be a custom peculiar to these people: I am not aware of any allusion to it, ancient or modern.

Human hands and Lingam.

Some of the women in Gippsland wear round the neck human hands, which Mr. Hull says were beautifully prepared. He moreover informs me that they sometimes wear the parts of which the "*Lingam*" and "*Priapus*" were the emblems. So in Italy, even within the last century, waxen images thereof were sold at a church festival. (See Payne Knight on *Priapus*.)

The worship of the "*Lingam*" was common among the Egyptians and the most ancient Indians.

Cannibalism.

The Cuthites, Scythæ, or Scythians, practised cannibalism: it was one of the rites of Baal worship (Bryant "*Myth*," vol. vi. p. 216), which we may conclude once existed here. It has been asserted that the Australian blacks are cannibals. This may be in some measure true; but if they were habitual feeders on human flesh, the instances would be so frequent as to leave no doubt upon the subject. But the cannibalism of the

Baal worshippers was a religious duty, and might be so with the Australian; not only a duty, but an act of piety and affection. The Indo-Scythæ killed their aged and sick friends and relatives, deeming it, moreover, an act of piety, a matter of duty and affection, to feed upon their inward parts.

"Cæsorume visceribus epulari fas est, et maximè piūmest."

"The natives north of Moreton Bay," observes Dr. Lang, "retain the same custom." It is also known among the southern tribes; for Dr. Thomson found in a camp near Melbourne a perfect specimen of a baked child, which he sent to the museum at Edinburgh.

The natives of various tribes frequently carry the bones of the deceased in their dilly, or open net-work bags. The skull is often used as a drinking cup by the nearest relative or friend. North of Moreton Bay they carry the corpse about with the tribe: after a time they tie it up in a bag and hang it on the bough of a tree. The crime of removing, or even disturbing these bones, can only be atoned for by the death of the offender.

Is it not, also, a custom among the North-American tribes to carry with them the body of any respected deceased person?

No native, I believe, will confess that he has eaten human flesh as a customary food, but rather shews an abhorrence of it; because, talking of any inimical tribe, he states that they "patta fellow," *i. e.* eat men.

If, however, the Indo-Scythians came here, or these tribes are descended from them, then the practice of occasional cannibalism is by no means surprising (Bryant's "Ancient Mythology," vol. v. p. 216), but rather will it prove to be a link in connecting the ancient and the present races.

Cannibalism is common in Buddhism. (See "Oriental Annual," 1835, pp. 176. 178. 194.)

Constellations.

Many of the constellations are believed to have been formerly black men, but now residing in the heavens. Some are deified. "Woor-do-itch" is the name of a star supposed to have been a native: has a brother-in-law a star named "Wor-

ditch," and is married to "Woor-jal-luk," another star. The brother-in-law, "Worditch," has two heavenly wives, namely, the stars Tda-dum and Bool-goot.

The planet Venus is called "Jula-go-ling."

Orion has two names among the Adelaide blacks—"Kurku-kurkurra" and "Tinniinyaranna," considered to be a group of youths, sons of the star named "Parnak-koyerli." They are great hunters of kangaroo, emus, and other game in the celestial plain which is called "Womma;" while the happy "Man-kamankarauna" girls (the Pleiades), occupy themselves in digging roots for the hunters on their return.

What an extraordinary similarity with the fables of mythology! Orion was a famous huntsman, and the Pleiades are seven sisters, daughters of Atlas.

"Parna" is a star indicating autumn, and it is also the mystic name or title of one of the two men who stand on either side of the youth at the ceremony of circumcision.

The Milky-way, "Wodli parri," is supposed to be a large river, the abode of a huge dæmon-serpent named "Yurra;" and the spots in the Milky-way are supposed to be the dark spots, "Yrakoe," on the back of "Yurra." "The great dragon that lieth in the midst of his rivers."—Ezekiel xxix. 3.

The appearance of a comet puts all the tribes in great consternation, being a forerunner of death and misery; a superstition common even in England.

Ophic Worship.

In all the ancient myths the serpent is an important character*, and he is no less important in the superstitions of the Australian blacks.

Fohi, the most ancient of the Chinese monarchs, is said to have had the head of a serpent. The Brahmins assert that the terrestrial globe rests upon the thousand-headed serpent, Ananta, (eternity). Kæmpfer says the Javanese believe that a dragon

* "Et movisse caput visa est argentia Serpens."

Juv. Sat. VI. 537.

dwells at the bottom of the sea. The Brahmins describe the churning of the ocean by the mystic serpent. In Isaiah xxvii. 1, "He shall slay the dragon that is in the sea:" Psalm lxxiv. 12, "Thou brakest the heads of the dragons in the waters:" Ezekiel xxix. 3, "The great dragon that lieth in the midst of his rivers."

The belief in this aquatic emblem of evil, who resided in the deep, fastening himself round the earth, or on diluvian mountains, is common in various mythologies. (See "Vernon Harcourt," vol. i. p. 261; Faber and Deane on "Ophic Worship.") Champollion has decyphered in the hieroglyphics an address to "The god who residest in the habitation of the waters."

It will now be seen that the Australian races indulge in similar superstitions.

There is an island called "Boro-yi-rong," in Lake Macquarrie, eastern coast of New South Wales, which is said to be the resort of an immense marine monster named "Wau-wai," who disports in the recesses under water. The natives hold it in great dread. They say that if a person standing on the cliffs throws stones into the water, presently pieces of the tea-tree bark begin to float up, and then the monster is seen ascending. He swallows up the natives' canoe, and all who might be fishing, and then descends to the depths below.

In south-west Australia, as well as on the eastern coast, there are similar superstitions. The tribes believe in an aquatic monster named "Wau-gul," also residing in fresh waters, and endowed with supernatural powers. (See Grey's Vocabulary.)

The Murray blacks believe in a fearful spirit named "Oor-undoo;" that he came down in a canoe, commanded the waters to rise, and formed the River Murray. He is said to have made the two lakes, Alexandrina and the Albert, in order to drown two of his refractory wives. The same superstition obtains among the Moorundi tribes, a hundred miles higher up the Murray.

Almost every deep-water hole in the interior is believed by the tribes to be the abode of some evil aquatic monster.

There is a great analogy between the Brahminical and Aus

tralian Ophic superstitions. The aborigines believe in the existence of an immense serpent, inhabiting high and rocky mountains; that he is not to be seen by mortal eyes. He is said to have produced creation by one blow of his mighty tail; also that, by shaking it, he produces earthquakes, and causes evil by death and sickness.

The serpent is assuredly connected with some of those mystic rites which are never revealed to the white man. These ceremonies are performed in sacred circles encompassed by raised earthworks.* The trees along the native tracks leading to these places are covered with carvings cut upon the bark, but more particularly with rude representations of the serpent—that emblem so frequently found on all Egyptian relics.

Near Trichinopoli, on the road to a very ancient temple, is a carving of a large hooded snake on the surface of the rock, which is held in great veneration by the Hindoos.

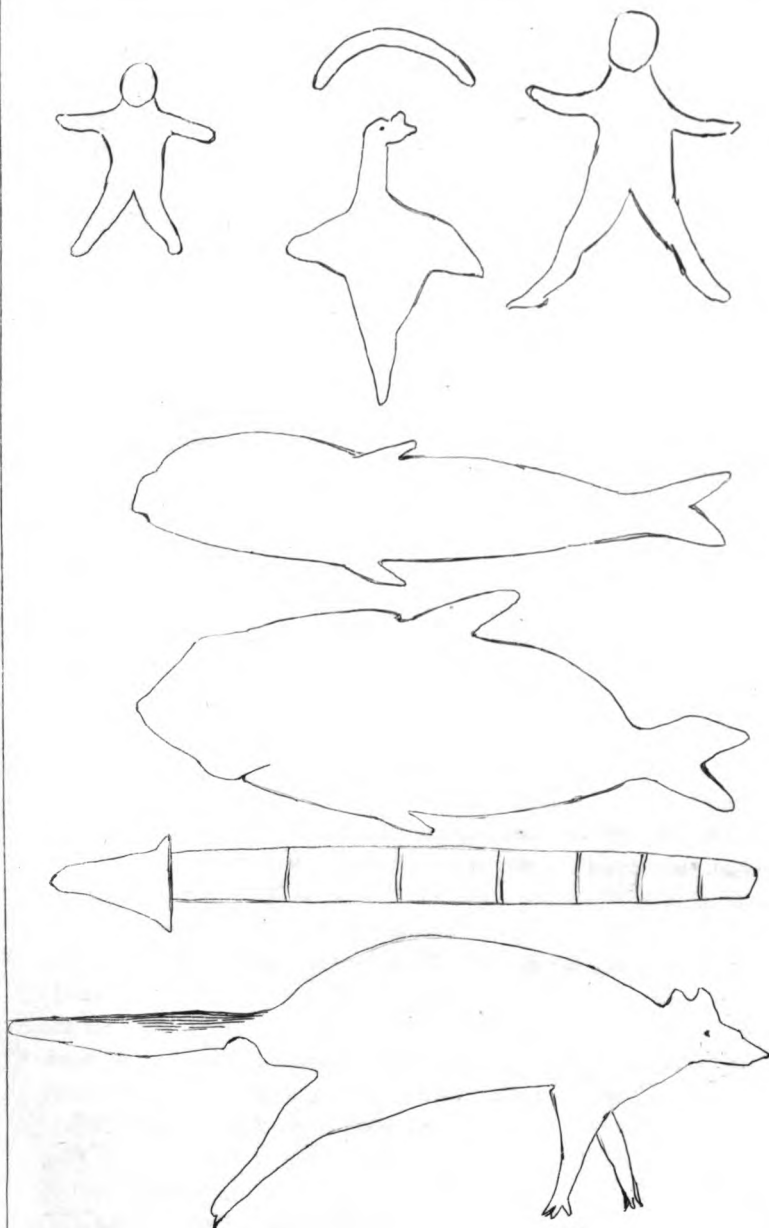
The large earthwork recently discovered on Bush Creek, near the north line of Adams County, Ohio, is a mound representing a serpent—a temple similar to Abury in England, and shews that Ophic worship prevailed in the wilds of America as well as in the wildernesses of Australia.

For an account of this serpent mound in Western America, see "Ancient Monuments of the Mississippi Valley."

The natives on the Murray and Murrumbidgee rivers believe in a spirit of the waters, named "Biam." (See Eyre, vol. ii. p. 362.) Like all their spirits, he is supposed to be a black man. He is believed to be deformed at the extremities, and is always sitting cross-legged on the ground, or ferrying about in his canoe. He is a spirit of such dreaded and malignant power that there are certain sorcerers particularly devoted to

* Similar entrenchments are in Scotland, where, as in Australia, apparently the Baal worship was known. Scott mentions an entrenchment on the Eildon hills, where it is said human sacrifices were formerly offered. The name of this entrenchment, Scott states, is "Bourja," a word, he remarks, of unknown derivation.

The mystic circle where rites are performed which no white man is allowed to witness, is called "*Bourra*," or "*Bôra*," among the Moreton-Bay tribes, New South Wales.



Carvings on Rock at Port Jackson, N.S. Wales.

propitiate him, or, by incantations, to avert his evil. Mr. Eyre witnessed the following ceremony on a patient who had bathed when heated, and, having remained too long in the water, was attacked by erysipelas. "The incantation is performed by three magi, who maintain the form of a triangle, advancing and dancing with a measured tread, the right foot always in advance, shaking green reeds in their hands, and chanting a low solemn dirge, while the natives who were behind the patient beat time by violently thumping the ground. The magi, after many mystic ceremonies, rendered their labours effectual by extracting from the limb of the patient the evil spirit in the shape of a sharp stone, which they drove into the ground; but it was too dark, they said, to see it——."

So at Zipan-ga (Japan), the belief is mentioned by Marco Polo, in the thirteenth century, that at Zipan-ga (Japan) the natives possessed charmed stones, and wore them between the skin and flesh of their right arms. (See "Superstitions.")

At Port Essington it is believed that evil spirits dwell in a large kind of tree, called "Imburra-burra," resembling the "Adansonia."

Carvings.

There are many carvings on the surfaces of rocks, rude representations of fish, birds, animals, human figures, and feet, as well as of boomerangs and other weapons. These carvings are generally on highland promontories, especially isthmuses, and near water. In the most desolate regions of South America Humboldt found carvings of animals on granite rocks. (Humboldt, p. 277.) Stoke "Narrative," vol. ii. p. 172, describes and figures some at Depuch's Island, N. W. Coast of Australia: Leichardt found some on the rocks near the Alligator River, Port Essington. They abound at Port Jackson, at Port Aitken, and have been seen by Capt. Perry, the Deputy Surveyor-General, on the mountains at the Hawkesbury River. Captain, now Governor Grey, found carvings also at Adelaide, as well as paintings in the caves.

According to the statement of an aged and intelligent aboriginal, the widow of a former chief of the Port-Jackson tribe,

none but the priest or conjurors visited these sacred spots, except when mystic orgies were there performed—dances, human sacrifices, Paphian orgies, and settlements or adjustments of disputed questions among the tribes. The locality of these carvings, on rocks near water and on promontories of isthmus, remind us of the sites chosen for the most ancient temples in former times. These carvings are plentiful in the vicinity of Port Jackson; and on the flat summit of a high mountain near “Koen,” or Cowan Creek, there is nearly half an acre covered with them.

The oldest Hindoo temples were erected close to water, and rivers were held sacred. The Brahmin is directed to say, “We meditate on the adorable light of the resplendent generator which governs our intellects, “*water*.” Prayers are offered to water, salutation “to the Regent of water.” (“*Asiatic Researches*,” vol. v. p. 355.)

Phales, the Milesian, attributed the origin of every thing to water, and Homer taught that Oceanus and Thetis were the parents of the gods.

The carving or representation of the foot is to be seen in Australia: it was of high import in the ancient world, though the mystical legend is not known, or is lost among the natives here. Carved representations of the feet were connected with the Buddhist rites, and chiefly near water. The “*Shra Baat*,” the sacred footmarks worshipped by the Siamese, is generally covered by water. On a ledge of rock over which water runs, not far from Merton, near Maitland, New South Wales, I am informed, there are impressions of feet.

There are impressions of two feet on the face of the rock at Little Redhead, near Newcastle, New South Wales. These marks are below high-water level, and are daily covered by the tides. The natives have no legend, and can only state that it was “made long time ago by first black fellow. There is a miry cavity near the celebrated sacred footmark in Ceylon, and on the rock, is an inscription not yet decyphered. The shape is peculiar, being rather an oval, and similar to the shape in Port Jackson, New South Wales.

To swear by the feet of a Brahmin is one of the most sacred and solemn of Hindoo oaths (Duff’s “*History of the Maha-*

rattas," vol. iii. p. 171); and might it not be that the homage and salutation to the foot of the Pope may be a relic of reverential respect paid in most early times to the foot of the Patriarch?

The Jeynes, a sect of Buddhists, revere the impressions of two feet-marks on a hill called Chandra Gurus, the mountain of the moon, said to have been left by their Patriarch Iwaro when he sprung up to the moon.

The Jeynes impress the red hand upon their temples: the red hand is found in caves in Australia, probably Mithraic; and the Australians, like the Jeynes, believe the moon to have been a man.

The superstitions of the Jeynes may probably throw some light upon the subject-matter of this paper.

There was an impression of a foot at Mecca before Islamism prevailed. Herodotus mentions one near Tyras, on the banks of the Tyros or Dneister; another has been noticed near the north-west corner of the Chinese wall, and similar memorials have been found even on the banks of the Ohio. (Harcourt, (?) p. 103.)

At Allahabad is an ancient subterranean temple, containing halls and caverns filled with idols, but the recess at the end, the sanctum sanctorum, is a small chamber, in which are two impressions of the human foot cut upon a flat stone. ("Journal of Voyage, South Seas," vol. ii. p. 327.)

In Ezekiel, xliii. 7 is the following passage: "The place of my throne, and the place of the SOLES OF MY FEET."

In the immediate vicinity of Derry, in Ireland, there still exists a stone which appears to have been an inauguration stone—the holy stone of the ancient Irish. It is of gneiss, and exhibits the sculptured impression of two feet ten inches long. (Hall's "Ireland," vol. iii. p. 233.) In the upper lake, county of Kerry, Ireland, there are footmarks on a promontory, and also in many other places in Ireland. In 1644 there was the print of a foot on a stone in the cemetery of Cork Cathedral. That of Clough na Cuddy, at Killarney, is said to be very remarkable. The Irish look upon these footmarks with exceeding veneration. (Hall's "Ireland," vol. i. p. 202, note.) Many of the ancient inauguration stones in the county of Limerick bear the imprint of something like the form of a human

foot, fancied by all the old natives to be the impression of the footmark of the first chieftain. (Hall's "Ireland," vol. i. p. 399.) As the round towers in Ireland are of Asiatic origin, the early footmark appears to be of the same origin, both in Ireland and Australia.

Red Hand.

The "red hand," the "*mano colorado*," is found in some of the caves on the eastern coasts of Australia. It is found at Ycaton, and termed the "*mano colorado*." The hands here are of different sizes, children and adults. The hands have been placed upon the rock, thumb and fingers widely distended; the intervening spaces have been painted, in some cases red, and in some white. It is in caves, or "gunyahs," near to and overlooking water, that these singular impressions are found. The blacks shake their heads very mysteriously if asked any questions about them, preserving a silence either of ignorance or fear. The usual reply is, "Black fellow make it so long time ago, before white fellow come." But on two different occasions two natives whispered to me in a most cautious manner, having looked round to see that the "Baal" demon, or the "Kohen," were not at their elbows, "All hand of dead fellow," spreading out their fingers for a short second of time, and evidently fearful at disclosing the mysterious legend. What the pigment is I cannot ascertain—it is indelible; I have endeavoured to remove some of it for purposes of analyzation, but to no effect. Many persons have told me that it is impossible to remove it; but the specimens I forwarded of two hands to the learned Dr. Pritchard may afford an opportunity of discovering the material.

On a rock cave in Port Jackson are impressions of a "red hand," not with the intervening spaces painted red, but the hand itself is red.

Now we will hear of red hands elsewhere.

Stephens, in his account of Ycaton, (that mysterious city in a wilderness, so ancient as to be unlegended,) states that he frequently found, what I was fortunate enough to discover here, the *red hand*, "the *mano colarado* prints," he says, "of a

red hand, with the thumb and fingers distended, not drawn or painted, but stamped by the living hand, the pressure of the palm upon the stone."

Impressions of this red hand have been found by Governor Grey on the north-western coast, near the Glenelg river.

Reference has been already made to the Jeynes, a sect of Buddhists, who impress the red hand upon their sacred edifices; but I am moreover informed that it is a common custom among the Arabs, to have it on their houses, to avert the "*malocchio*," the mythaic superstition, still rife in the Mediterranean, and known to the natives of Australia as a sacred myth.

This imprinting of the hand also obtains among the North-American Indians.

It was an ancient custom, and widely diffused. Robertson, in his "*Hindoo Customs*," says, that in the Mysore country the natives, in order to guard against evil spirits, dip their hands in lime, and impress it on the doors and walls of their houses, believing they are then under the protection of their deity.

In reference to these caves in which the impressions of hands appear, and which the natives informed me were the hands of "dead men," and which are near water, I regret that I have not a copy of Faber on the Cabiri; but in Bryant, relative to the Indo-Scythians, a race who, I think, may be traced to the shores of Australia, we find, vol. v. p. 218, "In caves human sacrifices were offered: these caves were near the sea."

Robertson, above quoted, in his "*Hindoo Customs*," says, that, in the Mysore country, to stamp the impression of the hand is equivalent to an oath. So with us to declarations, or affidavits, or legal deeds, we use the term "witness" (not my *hand-writing*), but "witness my hand." These documents refer only to "*my hand*," and not to my writing, produced by that hand.

At Perth there is a cave concerning which the Rev. D. Mackenzie remarks—"The only vestige of antiquity or art which has yet been discovered consists of a circular figure rudely cut or carved into the face of a rock in a cavern near York, with *several impressions* of open hands formed on the stone around it. The natives can give no rational account of

this. They tell some fables of the moon having visited the cave and executed the work." This fact again refers to the Jeynes, that sect of Buddhists above quoted, who use the red hand, and believe the moon to be the abode of their patriarch "Iwara," as the natives here believe the moon to be the black man "Taorong," previously mentioned.

Mr. Mackenzie further remarks, that the natives have little curiosity concerning this cave, and pay it no respect in any way. In short, it appears as if it did not concern them or belong to their people. Caves, with well-executed figures done in different colours, were found on the north-west coast by Capt. Grey. This rude carving at York may possibly be the last trace of a greater degree of civilization proceeding from the north, and becoming gradually more faint as it spreads to the south, till it is almost entirely obliterated; or, again, it may be the only monument now left to speak of a former race, which has altogether passed away and become superseded by another people.

In the Perth dialect, "dumbu" is the womb; "dumbun," a cave; "dumbin," to procure injury to another by "boyl-ya" or enchantment—the influence of "Baal" (Vide "*Dæmonia*," *ante*). It was in caves that the mysteries of Baal-worship were performed. (See Bryant.)

Chrystallomaney.

The "glain naidre" of the Druids, and the celebrated "lee penny" in Scotland, were not held in greater estimation, nor were they invested with greater superstitious reverence, than the "koradgee stone" of the Australian native. The koradgee or priest, or conjuror, possesses it. It is carefully enwrapped, and frequently tied up in a knot of the hair which is secured on the top of the head.

If a native woman should see it her death is inevitable.

A whole district and all the tribes were thrown into unappeasable terror and utter commotion, because the wife of a settler in the New-England district had beheld that mystic and venerated stone. Their consternation was only equalled by their surprise that she did not die or wither away. It is a quartz or crystal (see "*Highland Superstitions concerning*

the Crystal Ball"); and it is evident that it is the same superstition obtaining alike at the north and the south pole.

This koradgee-stone, like the lee penny, can cure all diseases: so the pixey-stone, in Cornwall possessed similar powers.

Crystal-balls have been found in Roman tombs.

Dr. Bennett, vol. i. p. 190, speaking of this koradgee-kibba, or koradgee-stone, says, "Those who take upon themselves the occupation to attend upon the sick or wounded unite the offices of priest, soothsayer, and physician. The few medicines they use are from the vegetable kingdom. They also make use of a crystal for the cure of diseases, not by administering it to the patient, but the physician employed its aid to act upon the superstitious mind of the sick man.

It is a common quartz crystal, and is called by the natives near Sydney by the compound word "coradjee-kibba," *i.e.* "doctor's stone." The Murrumbidgee and Tumat natives call it "merrüdagalli." Dr. Bennet witnessed the koradgee operating upon a native who had been speared. The patient was laid about thirty yards from the encampment; the physician—koradgee—sucked the wound, then, holding his saliva, he retreated ten or twelve paces from the invalid, appeared to mutter some charm for a minute, and, on concluding, placed the crystal in his mouth, sucked it, and then, removing the stone, spat upon the ground, and, trampling on the earth, pressed the discharged saliva into it, as if to tread out the evil spirit.

The natives believe that the "boyl-ya," previously mentioned, is the cause of all sickness and disease. In order to eject this evil spirit a method of enchantment is used among the Western-Australian blacks, which introduces the superstition of the mystic piece of quartz, and even appears to resemble mesmeric manipulation.

"This ceremony is performed," says the Rev. D. Mackenzie, "by the person who undertakes the cure squeezing the afflicted part with his hands, and then drawing them down, thereby to attract the boyl-ya to the extremities. He is very careful after each squeeze to shake his hands and blow well upon them, in

order to preserve himself from any evil influence or ill effects of the boyl-yā, who generally makes his escape invisible to uninitiated eyes, but sometimes assumes the likeness of a piece of quartz, in which case he is eagerly captured and preserved as a great curiosity. Any person having the reputation for effecting this cure is sought after by the natives, for many miles round, in behalf of a sick relative.

Marco Polo, who visited China in the middle of the thirteenth century, mentions the island of Zipan-ga (Japan), and states that the Chinese monarch had frequently attempted to conquer it, but in vain, because the inhabitants were reputed to have certain stones of a charmed virtue inserted between the skin and the flesh of their right arms, which, by the power of diabolical enchantments, rendered them invulnerable." (See Irving's "Columbus," vol. ii. p. 302.)

This superstition resembles the belief of the Australian natives when they pretend to extract the mystic piece of quartz from the human body, and thus to disenchant it.

The Dead.

The name of a deceased person is never mentioned, nor can you induce a native to break this custom. It is one of the many facts indicating a general superstition, as it is found on the eastern coast of Port-Philip, at Adelaide, at Swan River; and Captain Stokes, vol. i. p. 6, mentions the same. Mr. Hull states that a native died in the Port-Philip district whose name was also the name of "fire," and the natives have no word to express that element till they borrow or construct another for it.

It is customary among the tribes at Moreton Bay on the Murray, on Flinder's River, Gulf of Carpentaria, along the southern coast, and at Adelaide (see Angas' "Savage Scenes and Life"), to place a corpse in a tree. Capt. Stokes has a note (vol. ii. p. 297) in his narrative, that the same custom prevailed among the ancient Scythians, the same race to whom I have so frequently referred in the previous parts of this paper.

The corpse seen by Stokes on the Flinders River was enveloped in the bark of the papyrus tree. The bones of the dead are frequently carried from place to place at Port Essington (Stokes' "Beagle Narrative," vol. ii. p. 355), and the same custom exists among some, if not all, the North-American Indian tribes.

Some tribes in Australia bury their dead in a sitting posture; so did the Carib Indians, also the Incas; and one or two similar interments of ancient Britons have been found in England. Sir Richard Colt Hoare discovered one, and has a curious note upon it in his "Ancient Wiltshire." Another was found near Horsley in Gloucestershire.

The tribes place the war-implements by the side of the deceased.

Arrow heads and various implements are found in the British and in the Scythian tumuli, and also in the American barrows.

LANGUAGES.

Dr. Thomas Young has made the calculation, that if three words in two different languages coincide, it is ten to one they must be derived, in both cases, from some parent language, or introduced in some other manner. Six words would give 1700 to 1, and eight nearly 100,000. He then instances six words connecting the ancient Egyptian with the modern Biscayan. One of the words quoted is *kudchi*, "little," in Egyptian, and *gutchi* in Biscayan. "Kudjee," however, is a Sanscrit word of the same meaning; and it is an extraordinary fact, that on the eastern coast, and at Swan River on the western coast of Australia, "kudjee" is the native word denoting "little."

There is a small bay between the large bays of Port Jackson and Botany Bay called by the natives "kudjee" or "coojee."

It has been already shewn that the superstitions of the "Baal," the "Koen," and the "Menes" or "Menū,"* are yet re-

* मन *Mānā*, "to think."—J. Bellott, R.N.

maining among the rites and mystic ceremonies of the Australian tribes ; and I now submit some words to the test of language, in confirmation of what has been already advanced concerning the antiquity of this race of people, and the comparison is of words in the Australian dialects with the Sanscrit.

Sanscrit, *marā* ; Port Stephen, *marai*, "the spirit."

Sanscrit, *balaka*, "a boy ;" Swan River, *balagar*, "a native boy," and only applicable to a native youth.

Sanscrit, *Bhu-ja*, "to eat ;" Swan River, *BUDG-een*, "to eat."

Sanscrit, *JAN-a**, "to know ;" Swan River, *JIN-nung*, "to know."

Sanscrit, *hrti*, "the heart ;" King George's Sound, *gurti* and *gort*, "heart," apparently from the same root.

Sanscrit, नौ *nau*, "a ship ;" Port Jackson and Port Stephen, *NAO-wee*, a "ship ;" *vaos*, *navis*, *navy* ; Celtic, *nao*.

Sanscrit, *bhuri*, "much ;" Swan River, *buri*, "great," as *wunda buri*, "a native name for an English boat, in allusion to its shape," from *wunda*, "a shield," and *buri*, "great ;" Port Stephen, *murri*.

Sanscrit, *ka*, "a house or shelter ;" Port Stephen, *Ko-kerre*, "a hut or shelter." *Cai* in Gaelic, *kah* in ancient Egyptian, "a country or district, a temple." (See Bryant's "Ancient Mythology," vol. i. in verb. "Ca.")

Sanscrit, *murra*, "a circle ;" Swan River, *moorga*, "a ring or circle formed by men when surrounding game intended to be taken."

Sanscrit, *kudjee*, "small ;" Swan River on western coast, and Port Stephen, *kudgee*, "small ;" Adelaide, *kuti-yo*, "small ;" ancient Egyptian, *kudchi* ; Biscayan, *gutchi*.

Sanscrit, *kore* ; Australian, *kore*, undè *korage*, "native doctor ;" *χειρ*, *kor*, "hand-chirurgien."

Ba and *ya*, among the eastern Australian tribes, is the genitive affix. (See the Grammar of the Rev. L. Threlkeld, a work of considerable labour, and worthy of its excellent author.) *Ba* and *ya* implies "of," or "possessing," or "belonging to,"

as *Pritchard-i-ba*, "belonging to Pritchard"; *Pritchard's Baal-ya*, "belonging to Baal."

This affix *ba* is similar to the Hindoostanee *ka* (*che* of Chinese—Bellott), which is used in the same sense, and after the same manner: *bab-ka-beta*, "son belonging to father" "father's boy." *Da* in Chaldaic is the sign of the genitive case. (See Vernon Harcourt, "Deluge," vol. i. p. 196.)

The earliest languages consisted of simple and primitive sounds, generally a monosyllable; but through all the inflections of the longest Arabic word, the primitive letters, the radix, can be instantly detected by the scholar. It is called the *musdar*, and is the third person singular of an aorist, if my memory is correct.

The letters G and N form a root in etymology of great importance. It regulates the construction of words among the savages of Australia as well as the Arab: it also appears in the Sanscrit.

In all etymological inquiries it is found that certain letters *inter se mutantur*. Thus B and V are the same letters; G and K are alike; and the letter C is an interloper, as it is either a K or an S (unless in conjunction with H), and vowels are the means to pronounce the consonants.

The radix GN is applied to words denoting cavity and population. (*Vide* White's "Etymologican Magnum.") For instance,

In Sanscrit खन *khana*, "to dig."

In Arabic, كان *kan*, "sheath, cavity, a mine."

... کانگن *kangun*, "a worker in a mine,"

... کن *kunn*, "a shelter."

... کدو *kandoo*, "a digging spade."

Con-cha, *cen-otaph*, *can-alis*, *con-cave*, *can-oe*, *ca-vern*.

A comparison of words in the Port-Stephen or eastern, and in the southern and south-western dialects of the aborigines, will shew that the radix GN exists in the languages of this ancient race as it did in northern languages.

At Port Stephen,

GUN-ya, "a shelter;" *kunn*, in Arabic.

KONG-ka, "a hollow reed."

KIN-num, "a bag."

In South Australia,

KAN-yande, "the hollow made in the ground for a native oven;" so formerly in Scotland, *yernda* meant "large, wide."

KUN-da, "a bush kangaroo."

KAN-kandi, "to dig a hole." So in Arabic, كَنْگَن *kan-gun*, "a miner."

KAN-katti, "a digging spade;" كَنْدَر *kan-do*, in Arabic, "a digging spade."

At South-west Australia,

KON-ang, "the cavity or interior of the stomach."

KYN-dyl, "the soft inside of any thing; also that which is in a cavity of any thing, as seed of a plant, &c. &c."

KOON-de, "the marsupial rat, in reference to the pouch or cavity."

KOON-do, "the cavity of the chest."

This radix GN, as before stated, also refers to population or to female; as, for instance,

جنس *Jins*, "a generation."

كُنْز *Kun-neeze*, "a girl."

Bha-gin-a, Sanscrit, "woman."

Re-GIN-a, "queen."

GIN*, Australian name for a woman.

GAN-eesa, "chief female diety of the Hindoos."

GEN-esis.

KAN-na, Sanscrit, "to bring forth;" γυνω γυνή, *gens, genies, genero*.

In South Australia,

Sanscrit, अङ्गना *angana*, "a woman."—T. Bellott.

KAN-gandi, "to bring forth;" as *kan-na* in Sanscrit.

KAN-gallangalla, "a mother."

KAN-yana, "a congregation, a multitude."

Sanscrit, कन्या *kanya*, "a girl."—T. Bellott.

In South-west Australia,

JIN-dam, "eldest sister."

KOON-gur, "a young woman."

* *Gin*, a barbarism, not an aboriginal word.—T. Bellott.

Eastern coast, Moreton Bay,

Koon-gur, as in South-west Australia, is "a girl."

If this root had appeared in one or two words it might have been considered as a singular coincidence, and not deserving of much consideration; but there it stands in various languages, holding the same power, and distinctly traceable in the dialects of the Australian aboriginal: and if Dr. Young remarks that six words in two different languages give 1700 to 1 that they are derived from some parent language, how interesting must be the inquiry when we trace the same principle of constructing words from the savage to the most ancient and civilized of the human species!

The radix GN appears to be a monosyllable of some early language spoken by some race who at one time traversed the earth, probably the Cuthites, who spread themselves east and west, north and south, a powerful, subduing, and civilizing race, so ancient, that the accounts of them were almost legendary when the earliest profane history commences.

As the boulder stones indicate to the geologist the course of former floods of water, so to the careful etymologist will these radices, these lingual boulders, indicate the tides of population.

Referring again to the computation of Dr. Thomas Young upon the similarity of words in different languages, I now submit some Australian words of close resemblance to oriental words, which a Sanscrit scholar might probably trace with ease.

The termination is generally an inflexion, and in verbs of the infinitive. The root is the first syllable.

AUSTRALIAN.	ORIENTAL.	ENGLISH.
1 Mai-ya,	Mar,	Snake.
2 Kwon,	Khoon,	} Blood.
3 Kum-min,	<i>Pers. also</i> خون	
4 Yar-rei,	Darhee,	Beard.
5 Man-na,	Marn-a,	To take.
6 Mura-liko,	Pura-na,	To run.
7 Munn-i,	Mando,	Sick.

AUSTRALIAN.	ORIENTAL.	ENGLISH.
8 Nah,	Niherna,	To look.
9 Tur-liko,	Torna,	To break.
10 Yan,	Jahna,	To go.
11 Panna,	Panee,	Water.
12 Pi-liko,	{ Pi, "Kill," يودن Persian Imp. }	To kill.
13 Uni,	Een, (<i>Persian</i>)	This.
14 Yek,	Yek, (<i>Persian</i> يك)	One.
15 Bu,	Bu,	Two.
16 Mahe-gra,	Mahee makaru,	Fish.
17 Bira-ban,	Buhree,	Hawk.
18 Kor-e	Kur, (<i>Sanscrit</i>)	Man.
19 Bukka,	Bukht, (<i>Pers.</i> بخت)	Daring.
20 Mar,	Marna,	To strike.
21 Gong,	Gong,	Village, or place of rest.
22 Bangali,	Bangle,	Personal orna- ment.
23 Bibi "the female breast," <i>vulgo</i> <i>Anglice</i> "Bubby" }	Beebee, "a lady," بي	
24 Kalama, Gwab, "pretty,"	Gulum, "a reed," كلم Khoob, خوب	To write. Beautiful.

The learned Bryant states, that among the *most ancient races* the moon was known under the name of "Naki." It is called to this day Méki, or Maki, among the Adelaide tribes.

He also states, that of equal antiquity was the name of Noah, as applied to the sun. It is also one of the names for the sun on the eastern coast (Port Stephen), and pronounced precisely the same.

Bryant states, that "*Aur*" is a primitive word signifying "light" or "fire." Hence the Hebrew "*Aur*," the sun; the "*Ur*" of the Chaldees; the "*Orus*" of the Egyptian; the "*Alorus*" of the East; the "*Aur-ora*" of mythology; "*Uro*," "*Ardeo*," and, according to Vernon Harcourt, vol. i. p. 147, "*Ar-ka*," one of the names of the sun in Hindoo mythology. This primitive word "*Aur*"

obtains even in Australia: the "Yurra" or "Ura" at Adelaide. At Port Jackson, and even on the banks of the Bogan river, the sun is called "Uroka" and "Eeree;" the latter word also implies fire. Bryant, vol. vi. p. 316, states that "Alorus" was worshipped with fire, and that human sacrifices were offered to him. It is a fact well ascertained that the aborigines, at least some of the tribes, have been known to partake of human flesh; but it is by no means a frequent custom, and might, in fact, be a superstitious rite connected with Sabæism; but it will be shewn, under the question of superstitions, that eating their relatives is here an act of piety, as it formerly was considered among the early Cuthites, Ethiops, or Indo-Scythians, who were all addicted, says Bryant, to cannibalism and human sacrifices.

Relative to Celtic words, as "nao" and "cae" being found at the antipodes, I remember that Dr. Borlase, in his History of Cornwall, was in doubt concerning the meaning of the word "tolmen" supposed to have been stones of veneration. The word "tolmen" in Australia is "a grave." It is probable that the word "tolmen" in Cornwall, might have been the burial spot of some renowned person, probably some noted druid or exalted personage, and that the stones placed were a kind of shrine or sacred spot over the "tolmen" of the deceased. It is, however, difficult to discuss these matters at the South Pole: I only rely upon memory, but the remark may induce inquiry.

There is a greater minuteness in the delicacy and construction of the native languages, both as to numbers of the nouns and the verbs, than I know to exist in any language, ancient or modern.

On reference to the words already given, it will be seen that a similarity, or indeed, the same words, are found in various parts of the coast. One striking instance is the verb "buma," in use at King George's Sound, (S. W. Australia, and also at Port Stephens, (Eastern Coast,) signifying "to strike."

There is not a portion of the human body but is named; not a bird, nor grub, nor plant, nor shrub, nor grass, but of which the savage can tell you the name by which it is known. Could a civilized peasant do the like? There is not a mountain, plain, or promontory, not a hillock on the plain, not a

bay, or creek, or rock, or gunya, but has a name; and if the language had been deemed worthy of attention, there is no doubt but that those names are descriptive. There is a hollow in a rock between Port Jackson and Moreton Bay, on the summit of a mountain, which is called "the cup for the eagle's drink."

In Wales the names of places are descriptive, and often poetical. I remember fishing on the banks of a river rising in Cader Idris and flowing near Towin. Its course had been noisy, precipitate, and headlong in its first stages, but coming into the low level lands through which it had to pass to the parent ocean, its fume, its foam, was lost, it glided on imperceptibly, the angler's fly met with no eddy; and the name of this stream (still vivid in my recollection after a lapse of years) was "Dee-swny." I may be incorrect as to the orthography, but the name of this silent gliding body of water is Homeric and Ossianic, viz. "noiseless."

Dr. Lang, in his work "Cooksland," observes that the natives have an innate propensity to form a language by analogies. He instances the ingenious and descriptive name given to a marble-covered book by the blacks at Moreton Bay, and which, to them, was an object of novelty and surprise. They noticed the hollow back or hinge when the book was opened. This reminded them of the hinge of the muscle. The gaudy, marble-coloured binding was like the brilliant colours on the shell. They also observed, that when the white man looked into it, it seemed to impart ideas to him; so they immediately named it "the speaking muscle."

The Rev. David Mackenzie relates, in his "Emigrants' Guide," a similar propensity among the blacks at Swan River, when they were astounded by the sight of the first cow; but they named it forthwith, and after this fashion. It is the custom, in their native dance, for the performers to wear long ornamented sticks in their hair: these sticks are called *jingalla*, and they named the cow *jingalla gaduk*, literally "a possessor of long stick in the head."

The Rev. D. Mackenzie gives another instance of the facility of the natives in compounding words; for instance, *wadna* is "a shield." These people have no canoes, and they

named an English boat *wadna-biri*, from its shape like a big shield—*biri*, Sanscrit word, signifying “great.”

The human nipple is called *bibi-mulya*; literally, *mulya*, “the nose, *bibi*, “of the breast.”

Count Strzelecki, in remarking that different tribes cannot understand each other, is inclined to consider that the dialects do not bespeak a common root. Yet in the previous remarks in this paper it is shewn that a great similarity of superstitions exist in opposite parts of Australia, and, in many instances, the same words.

It is remarked by Borrow (“Bible in Spain,” p. 146), that the Gallician gypsies say, “that in no two villages is their language spoken in one and the same manner, and that they frequently do not understand one another.”

An Englishman who has lived all his life within the bills of mortality would be unable to hold a ready conversation with a Lancashire or a Cornish man who had never been further from his village church than to the nearest market town.

It has been recently discovered that the Tootties, the most degraded of the Pariah races at Madras, a race so low that no person took the trouble to examine their language; yet it is now found that they speak the same dialect as a very low class of natives, scarcely known, and who inhabit the hills and mountains to the northward of Madras.

A collation of their words with some of the Australian vocabularies might throw some light upon this subject.

Horne Tooke says “languages can never lie;” and I now leave my memoranda to the ethnological inquirer.

The aborigines are fast decreasing. Capt. Hunter, in 1788 when the first ships entered Port Jackson, observes, p. 428, “the women bear no proportion to the males.” I am induced to believe that the Australian blacks are a relic of a most ancient race, partly shewn by the singular dental arrangement among some of the tribes, and also by existing superstitions of the highest antiquity.

Have not these races lived their appointed time?

The inscrutable laws of nature, ever active, creating and destroying, the secret law which decreases the females among the Australian tribes, has also regulated the population of the

white inhabitants. The number of white children in the colony under seven years of age is 44,584, and the females predominate by eight.

	Males.	Females.
Under two years - - -	7884	7898
Above two and under seven -	14404	14398
	<u>22,288</u>	<u>22,296</u>

Many of the Australian tribes may be considered as decreasing, not only by means of the disparity of the sexes, but also by the appearance of the white man. It is stated, and believed to be correct, that if a native female bears a half-caste child, she never conceives again with her own race: she is lost to them, and the natives generally destroy all half-caste children. The law of decay is rigid: the tribes are not increased by the admixture of other blood.

As the moa bird of New Zealand, and the dodo, have recently become extinct, so we have now to observe whether the Australian races are not fading from the earth, and passing away for ever.

NOTICE OF ETHNOLOGICAL PROCEEDINGS

AT THE IPSWICH MEETING

OF THE

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,

Held July 4th, 5th, 7th and 8th, 1851.

By RICHARD CULL, Esq., HONORARY SECRETARY.

THE science of Ethnology is now fully admitted to a local habitation and a name in the British Association. The growing importance of the science, its successful cultivation, and the large space it occupied at the Oxford meeting in 1847, induced the Council of the Association, at the Edinburgh meeting in 1850, to order that in future a section devoted to Geography and Ethnology shall be constituted and named Section E. And at the Ipswich meeting the first meeting of the section thus constituted met, under the presidency of Sir Roderick Impey Murchison, F.R.S., and the following officers:

VICE PRESIDENTS.

The Bishop of Oxford.
 Captain Sir James Clark Ross,
 R.N., F.R.S.
 Captain Fitzroy, R.N., F.R.S.
 Colonel Rawlinson, F.R.S.
 Dr. R. G. Latham, F.R.S.

SECRETARIES.

For Geography,
 Dr. Norton Show.
For Ethnology,
 Rev. J. W. Donaldson, D.D.
 Richard Cull, Esq.

COMMITTEE.

His Excellency Chevalier
 Bunsen.
 Capt. Sir J. Alexander.
 William Bollaert, Esq.
 Dr. C. T. Beke.
 John Craufurd, Esq., F.R.S.
 Signor B. Cini.
 Charles Darwin, Esq., F.R.S.
 Dr. Hodgkin.
 Dr. Hamel.
 The Mayor of Ipswich.
 Rev. C. G. Nicolay.
 J. B. Pentland, Esq.
 Col. Reid.

Rev. J. S. Rigaud.
 Capt. Strachy.
 M. Pierre de Tchihatchef.
 M. Platon de Tchihatchef.
 Asa Whitney, Esq.
 Count Strzelecki.
 J. O'Gorman, Esq.
 John Hogg, Esq., F.R.S.
 Col. Philip Yorke.
 M. Antoine D'Abbadie.
 Captain Loch Lewis, R.E.
 Major Carmichael Smyth.
 Dr. John Lee, F.R.S.
 F. Tuckett, Esq.

This large staff of officers was composed of geographers and ethnologists. The following is a list of the papers which were read, and which are printed, *in extenso* or in part, in the British Association Reports for the year:—

Thursday July 4.

Ethnological researches in Santo Domingo, by Sir Robert Schomburgk, communicated to the Ethnological Society, but too late for the session, by H. R. H. Prince Albert, and thence sent to the British Association.

On certain races in the Bengal Presidency, by Robert Young, Esq., M.R.C.S.

Friday July 5.

On ethnological classification, considered with reference to two unsolved problems in Indo-Germanic Philology, by Dr. Donaldson.

A synopsis of the languages of Ethiopia, by M. Antoine D'Abbadie.

On the origin and institutions of the Cymri, by George Barber Beaumont, Esq.

On the archæology of the Norse and Saxons in reference to the eastern counties of Great Britain, by William Devonshire Saull, Esq., F.G.S.

Monday July 7.

On the inhabitants of Kumaon and Gurhwal in the Himalaya mountains, by Captain Strachy, Bengal Engineers.

On the Negro races of the Indian Archipelago and the Pacific Islands, by John Craufurd, Esq., F.R.S.

Notes on the Australians, by J. P. Townsend, Esq.

On the ethnological position of the Brahuis, by R. G. Latham, M.D., F.R.S.

Tuesday July 8.

Observations on some aboriginal tribes of New Holland, by Dr. Heywood Thomson.

On a comparison of the physical proportions of certain athletic men, natives of Great Britain, with the physical proportions of certain ancient Greek statues, by J. B. Brent, Esq., Barrister-at-Law.

REPORT OF A MISSIONARY TOUR IN THE NEW HEBRIDES.

Communicated by the Right Hon. EARL GREY, Principal Secretary of State
for the Colonies. Read 11th of December, 1851

Imp. J.

TO SIR GEORGE GREY, K.C.B.,

Governor in Chief of New Zealand, &c. &c. &c.

SIR,

I HAVE the honor to present to your Excellency a Report of my Missionary tour through the New Hebrides and other islands in the Western Pacific.

It was through the interest of your Excellency, and the kindness of Captain Erskine, that I obtained a passage, for this purpose, on board H.M.S. "Havannah" in her late cruise through the islands. Before proceeding, therefore, to the main subject of my report, I cannot omit this opportunity of expressing my obligations for the facilities thus afforded me for prosecuting my object. Of the kindness and courtesy of Captain Erskine, and the polite and obliging disposition and conduct of his officers, I cannot speak too highly. The Lord Himself reward them!

The "Havannah" left Auckland on the 8th of August 1850, and visited the New Hebrides, Queen Charlotte's Islands, the Solomon Islands, and New Caledonia, and arrived in Sydney on the 8th of November following, the cruise thus occupying three months. In the New Hebrides group we anchored at Anciteum (often incorrectly called *Anatani*), Tana, Erumanga, Fâté, and Manicola or Malicola; held intercourse with the natives of Ambrim; examined part of the coast of Espiritu Santo; and passed in sight of all the islands in the group. Of Queen Charlotte's Islands we visited only Vani-

kolo; but there we anchored at the very place where La Perouse's two vessels were lost in 1788, and whose loss remained a mystery till discovered by Captain Dillon, in the "Research," in 1826. In the Solomon group we coasted along, and held extensive intercourse with the natives of, Toro, or St. Christoval, and the Isle of Contrariety; and we discovered a harbour, and anchored on the north-east side of Malata. In connection with the "Bramble," the "Havannah's" tender, we visited the whole of the north-east coast of New Caledonia, and about one-fourth part of the south-west side of it. The "Bramble" visited the Loyalty Islands and the Isles of Pines.

In their *general character*, in their geology, their botany, and their fauna, so far as our observation extended, the New Hebrides, Queen Charlotte's Islands, and the Solomon Islands, bear a considerable resemblance to New Zealand. New Caledonia, on the other hand, in its botany especially, is more like New South Wales, although its fauna is more allied to New Zealand. As in New Zealand, the volcanic character predominates more or less through the New Hebrides, Queen Charlotte's, and the Solomon groups. In Tana there is a large volcano, which was seen by Captain Cook when he discovered the island. A party of us from the "Havannah" visited the volcano. We saw seven or eight craters: three or four were extinct, two or three were smouldering, and two were in a state of great activity; every five minutes or so the one or the other emitted a dense cloud of smoke, exploded with a sound like thunder, and discharged a shower of molten matter. The sight was grand, sublime, and occasionally terrific. The volcano is always active, though the eruptions vary very much in violence and duration. We were very near to it before we heard any sound; but at times it is heard at Anciteum, a distance of from thirty to forty miles. The mountain is low, and over an area of perhaps three miles in diameter it is covered with ashes. It is close to the sea upon one side, about four miles from Port Resolution on the other. For a considerable distance along the side of Port Resolution next the volcano there is a succession of hot springs bubbling out from the rocks on a level with the tide mark, of all tem-

peratures from the boiling point downwards. The water from these springs is fresh, has no peculiar taste, and appears to be used regularly by the natives. We observed no water between Port Resolution and the volcano. In one or two places the smoke is issuing from the ground, and the soil is burnt and cracked. The appearances are precisely as they were described by Captain Cook seventy years ago.

These three groups exhibit much of the same mountainous character as New Zealand, and the same humid atmosphere. Apart from purely tropical plants, there is the same dense vegetation, the same close undergrowth, the same profusion and variety of ferns. *The Damara* or Kauri pine, peculiar to the north of New Zealand, we found, though of a different species, both in the New Hebrides and Queen Charlotte's Islands. In all these groups, as in New Zealand, the only indigenous quadruped is a small rat; the only reptile is the lizard. We found a sea-snake in the New Hebrides, but there is no poisonous reptile on land. Ducks and pigeons are plentiful in all these groups, and swallows, unknown in New Zealand, are common to all these islands with New South Wales.

The *population* of the New Hebrides may be about 40,000; of New Caledonia and the Loyalty Islands it may be about the same number. Queen Charlotte's unknown, but small; probably a few thousands. Solomon Islands also unknown, but, so far as we saw, numerous. These calculations, from observation and inquiry, have been made with as much care and accuracy as circumstances would permit, and with the constant recollection that guessing invariably leads to the over-estimating of numbers, and that in almost all uncivilized tribes the census has been over-rated.

The inhabitants of all these four groups belong to the *Papuan* or *Negro* race: they are quite a distinct race from the inhabitants of eastern Polynesia. In their personal appearance, dress, mode of living, government, warfare, and customs, they are all much the same. They have all curly or woolly hair. They are darker than the New Zealanders or the Samoans, but not nearly so black as the Africans. They are of the middle size, but they vary in size in different islands;

in Anciteum they are below the average, but tight and well made. In Fâtê they are above the average size, strong, and robust. The women in Fâtê are tall and slender. Their *clothing* throughout all the groups is essentially the same : the principal difference is in the island of Fâtê, where the dress of the men is fuller, and has decidedly more respect to decency than in the other islands. The men everywhere, except in Fâtê, wear only a narrow cincture and a wrapper of leaves or native cloth, after the manner of the Caffres about Delagoa Bay, or the natives of the Isthmus of Darien. The women wear round their middle a mat manufactured from the rind of a tree. In the New Hebrides this dress is much fuller than in New Caledonia. In some islands the women wear an appendage to their dress behind which looks like a tail ; and as they are seen from the deck of a vessel, walking on the shore, their appearance might easily give rise to the story of people being discovered with *tails*. This is the whole of their ordinary clothing ; but in New Caledonia they have a large mat to cover them completely, and protect them, when necessary, from rain or cold : it is, in appearance, like some of the coarser mats among the New Zealanders. In Anciteum, Tana, and, to a small extent, in Erumanga, the men dress their hair in a peculiar manner. The hair is separated into small locks, and tied round from the roots to the top with a narrow rind : when fully dressed in this way it has the appearance of a bunch of small whip-cord spread over the head and fastened behind. In New Caledonia the chiefs and influential men wear their hair long, and tie it up in a semi-conical form on the top of their head. The women all crop theirs close to the very ears. The tall, lank ladies of Fâtê have on this account a most hideous appearance.

Their *food* consists chiefly of indigenous fruits and vegetables, as the cocoa-nut, bread-fruit, taro, yams, kumeras, bananas, sugar-cane, &c. They also use fish, fowls, and pigs. In New Caledonia they boil and eat locusts in great quantities. To these they are now adding maize, pumpkins, melons, the papaya-apple, and other exotic productions. In New Caledonia there are no pigs. They have little wood adapted for fencing, and pigs would destroy their plantations ; so that, till

some new arrangement can be introduced, they must dispense with this common animal.

Their principal *occupation* is clearing, fencing, and cultivating their plantations, which they keep with great care. They practice irrigation to a great extent. In Anciteum we saw canals cut along the sides of hills more than a mile in length. Their skill in the *arts* is very limited. In the New Hebrides they excel in the making of mats, baskets, armlets, and in the constructing of fences. In the Solomon Islands they are most distinguished by the lightness and elegance of their canoes; by a tasteful carving of wood, and inlaying of it with mother-of-pearl; and by forming various ornaments of shell. In New Caledonia they manufacture coarse earthen pots for the cooking of food, similar, but inferior, to the earthenware made by the natives of the Fije Islands; thus furnishing one proof of relationship or common origin between the natives of those two groups. The largest canoes and the best houses are found in New Caledonia. The houses are constructed of a wattled frame, and, thatched with grass; the walls are round, and the roofs conical: in appearance they are like corn-ricks. In the other islands they are simply oblong roofs, some small, others very large. At Port Sandwich, in the island of Malicola, we found in every village, so far as we were allowed to examine them, images as large as life, dressed as men, and apparently looked upon as sacred, but their precise object and use we could not discover. The images seemed to be made of some kind of native cloth, stuffed with some firm but plastic substance; the figure was well formed, and the face was painted somewhat like an Egyptian mummy. We found three or four in the sacred house of each village. Adzes of green stone, the same as that found in New Zealand, are plentiful in New Caledonia. Bracelets, curiously wrought of small bone rings, are made in most of the islands. Tatooing is not practiced by them.

War appears to be universal. The Missionaries in the New Hebrides have ascertained that the natives are occupied fighting for ten months in the year: we found more or less of it almost everywhere. They blacken their faces when engaged in war; but in native warfare, carried on with native

weapons, there is little loss of life: if one man is killed on either side the battle usually terminates for that day. They meet, however, day after day, for battle, although often no engagement takes place. The losing party, after a battle, are careful in examining whether any one has infringed any of their appointed observances. Husbands are not allowed to cohabit with their wives during war. Of the native war weapons some are common to all the islands, such as clubs of different forms; others are restricted to particular groups. In the New Hebrides the missiles are principally spears; in the Solomon group bows and arrows; and in New Caledonia sling-stones: these are generally ground to nearly the size and shape of pigeon eggs. The natives are most expert, both in using their respective weapons, and also in evading those thrown at themselves. One of Captain Cook's officers found Homer's description of the throwing of the spear illustrated and confirmed in every point by what he saw at Tana. If the New Caledonians are not equal to the famous Balearic slingers of antiquity, or to the left-handed Benjamites, who could sling stones to a hair-breadth and not miss, they at least remind one of David's five smooth stones from the brook, and his shepherd's bag. Each warrior carries a small bag containing a few stones, either selected for being smooth, or made smooth by art; and they are such correct marksmen, that they will strike down a staff at a considerable distance. They have no such thing as a *pah*, or fortification of any kind, nor do they appear to practice strategy in war, like the New Zealanders. The club has, in many places, been superseded by the tomahawk. Fire-arms are also finding their way among them. Since the natives of the Isle of Pines obtained fire-arms they have gone over and nearly depopulated the south end of New Caledonia. Throughout all these groups *dancing* appears to be a principal amusement. In the New Hebrides, for two months at one season of the year, the natives meet daily about mid-afternoon, and continue dancing till day-light next morning. In returning from the volcano in Tana we came upon a dancing party, from four to five hundred in number. They were assembled in an open circular space, shaded by spreading banian trees, to celebrate the ripening of the bread-

fruit, and the removal of the *tapu* from the trees. It might be regarded as a kind of harvest home. About one-third were dancing, and the rest, for the time, spectators. The figure of the dance was circular; the men were in the centre, and the women, two deep, formed a ring outside. They closed to the centre, and then extended, then coursed round and round, and, when the excitement was raised to the highest, with a simultaneous shout they all suddenly stopped, and, after a short interval, the same party proceeded as before. The dancing was a continuous earnest leaping or jumping, rather than a series of elegant artificial or acquired movements. Instead of the "light fantastic toe," it was the heavy thumping heel. The women had their faces besmeared with a black pigment, their heads were decorated with feathers, they were dressed with flowing petticoats of the *dracæna* plant, surmounted behind with monster bustles of fern leaves, and each one carried a club or a spear. The men were besmeared with a red ochre; and almost every dancer wore one or two rows of white shells on the arm, the rattling of which, while they were dancing, supplied the place of music. The array of clubs and spears, and the warlike appearance of the dancers, might have suggested to some minds the idea of the ancient pyrrhic, or the modern polka in its primitive Hungarian form; but the white teeth and eyes shining through ochre and pigment, the perspiration flowing down their faces, the fantastic dresses of the women and the all but complete nudity of the men, and the savage shouts and yells of both sexes, remind one more of a dance of demons and witches, but ludicrous rather than terrific.

"Of withered beldames auld and droll,
Ringwoodie hags would spean a foal."

Dancing, like war, is practised by civilized as well as savage nations, but it does not appear to be one of the procuring causes of their civilization.

At Fâtë and Malicola, in the New Hebrides, every family, or every few families, have a cluster of *drums*. These are made from trees hollowed out like a canoe, and fixed into the ground, rising about six feet high. The opening on the side of the tree is as narrow as it can be made to allow the wood to

be scooped out of the centre. These drums are in general ornamented with rude carvings of various kinds, and from ten to twenty of them are fixed in a cluster a few feet apart from one another. They emit, when struck, a hollow funeral sound, and are employed to furnish music at their dances, and on other occasions. At the Solomon and other islands we found a long carved *pipe* or *flute*. In New Caledonia they beat sticks on one another as an apology for music. The natives of Anciteum sing beautifully, greatly surpassing any thing I have heard among the New Zealanders.

In the New Hebrides the drinking of *kava* prevails. In Queen Charlotte's and the Solomon Islands the *betel nut* is chewed, and the teeth of the natives are universally black. In New Caledonia and in the New Hebrides *tobacco* is fast coming into general use, but the taste for alcoholic liquors has not yet been acquired.

In the New Hebrides, and, I presume, also in the other islands, there are great *feasts* on particular occasions; but at these, as in New Zealand, it is rather the receiving than the eating of food. It is one chief or tribe making a large present to another. This mode of feasting is extremely unfavourable to industry and economy, as those who are most industrious, and the greatest producers, are expected, if not obliged, to contribute most to the feast.

For some years past, in most of the groups, the sandal-wood trade has been the principal traffic. The *beche-le-mer*, a large black sea-slug, has also been collected in large quantities, dried, and sold to the traders, and by them, with the sandal-wood, sent to the China market. Yams, pigs, and other native produce, are supplied to traders and whalers in exchange for tobacco, edge-tools, clothing, and trinkets. Many of the natives have gone on board trading vessels, and proved good seamen. The Missionaries find that they make good and active servants.

The natives appear to be healthy: they are well formed, vigorous, and robust. In the New Hebrides, especially, they have beautiful white, well-set seams of teeth. We saw occasionally cutaneous eruptions of a slight character among them, and one or two cases of elephantiasis. In Fâtë we saw

one case of idiocy, that of a young woman. In New Caledonia we saw more disease than in the New Hebrides, although the former is a more healthy climate for Europeans and foreigners than the latter, there being no fever and ague in New Caledonia. Hernia and hydrocele were common. One case of hernia I saw seemed to be as marked as that of Gibbon's. Ulcerated noses and faces were very common in New Caledonia; but whether connected with venereal diseases or not seemed uncertain. Influenza and other epidemics prevail among them occasionally, and prove more or less fatal. The number of children appeared larger in proportion than I have seen in New Zealand, but the number of old persons seemed to be small.

Their traditions are much the same as those in the Eastern Pacific; I speak principally of Anciteum, where the Missionaries, having mastered the language, a key has been obtained to unlock this depository of knowledge. They have the same traditions respecting the creation, the deluge, and some other great facts of universal history; that the island was fished up by one of the gods, who afterwards made a man and a woman, from whom the inhabitants were descended; that, in consequence of the wickedness of the people, the gods were angry, and one of them sent a flood, which drowned all the people except a man and his wife that were saved in a canoe. A native was one day listening to an oral translation of the flood, made by one of the Missionaries. He appeared particularly attentive, and at last said to the Missionary, "Stop! that is almost the same as our account;" and after detailing their tradition, he added, "But your forefathers have written an account for you, while ours only told it to their children: yours must be more correct than ours."

In Anciteum the natives believe in, and worship, beings called *Natmasses*. Their mode of worship is thus: they select long-shaped stones, from three to eighteen inches long, and pile them up under a banyan tree. They suppose that the spirit of the divinity resides in each of the stones. There is generally a small chip broken off one corner of the stone, at which the spirit goes in and out. Offerings of good of various kinds are presented before these piles of *Natmasses*, on which, in

some invisible way, they are supposed to feed. They have an order of priesthood, but it is usually held by the chiefs, who thereby increase their influence. A future state of rewards and punishments is believed in; but heaven partakes much of the character of earth. The cocoa-nuts and the bread-fruit are finer in quality, and so abundant in quantity as never to be exhausted. It is difficult to ascertain the grounds on which it is believed the separation is made in the other world; but theirs, like all false and superstitious religions, makes happiness after death to depend more upon ritual observances than upon moral conduct: the power and authority of the priest is made to avail, more than the personal character of the worshipper. But as the priests are the conservators of the religious mysteries, and as they look upon the Missionaries with a very jealous eye, they have been very reluctant to communicate any information bearing upon the religious belief of the natives. Their deities are all represented as malignant beings, and hence fear, and not love, is the leading motive in their worship. "Naijerun" is one of their chief divinities: in moral attributes he is very like Satan. Benevolent deities they have none. The God of the Bible, a Being of goodness, mercy, and purity, is to them an *unknown God*.

The *tapu* is employed in all the islands to preserve persons and objects. The cocoa-nuts are laid under a tapu till all the other crops are planted, or till some feast is celebrated; and death is the penalty of touching the forbidden fruit. Circumcision is practiced in New Caledonia, and possibly in all those islands: it is performed at any period before puberty; but Ishmael's, rather than Isaac's age appears to be the example followed. It is confined principally to the sons of chiefs and influential persons, and is celebrated by a feast. At Malata, in the Solomon group, the surgeon of the "Havannah" saw two eunuchs: they were tall and thin, with narrow shoulders, prominent abdomen, and a weak, feminine voice.

In *natural disposition* the natives appear to be in general mild, affectionate, and susceptible of great improvement. In Ancientum, after two years' experience, the Missionaries have the most entire confidence in their honesty and fidelity. Although at first the natives stole articles, speared their pigs,

and injured their property, now persons and property are both perfectly secure. But when the cupidity and the sanguinary passions of the natives are excited, as they often have been, and still are, by sandal-wood traders and others, neither property nor life are safe. In all the groups the women are noted for their easy virtue, and their intercourse with foreigners has deteriorated, and not improved their morals. Polygamy prevails to some extent, especially among the chiefs. In the New Hebrides the wife is put to death by strangling upon the death of her husband, or even when he is long absent from home, and all the children, not able to support themselves, share the same fate. In Anciteum the dead are not buried, but, with some ceremonies, thrown into the sea. In all the groups the rites of sepulture seem to be little attended to. In different places we saw quantities of bones, apparently not those of enemies, bleached and withered beneath the winds and suns of successive years. To express deep grief, the women inflict wounds by burning on the upper part of their arms.

But the fearful moral degradation of both eastern and western Polynesia is seen in nothing so clearly as in the nearly universal practice of *cannibalism*. No practice is so revolting to humanity, so brutalizing and demonizing, as the eating of human flesh; a practice happily all but unknown in the northern hemisphere, either in ancient or in modern times; a practice never hinted at in Scripture or in Josephus, except in connection with the extreme of famine, and even then as producing a feeling of the deepest horror. The ancient poets feign that Diomedes, a king of Thrace, fed his horses with man's flesh, and that Hercules slew him, and threw him to be eaten by his own horse. The Roman historians bring some doubtful charge of cannibalism against some of the western barbarians. It is only certain that the druids offered human victims in sacrifice, but this was to the gods. The ferocious sea kings of Scandinavia, as a token of revenge and victory, drank their wine out of the skulls of their vanquished enemies. Shakespeare makes Othello class among travellers' wonders.

"The Cannibals that eat each other,
The anthropophagi, and men whose heads
Do grow beneath the shoulders."

Two hundred and fifty years ago Nundana and Quiros, who first discovered these islands, and even the navigators who re-discovered them in the end of the last century, suspected the existence of cannibalism amongst the natives, rather than believed it could be true. Up to that time the history of the world furnished little more than doubtful proof of the real existence of such a practice. It was looked upon as barely possible, but never as certainly true. But now, of late years especially, it has been demonstrated that cannibalism has been, to a greater or less degree, universal in both Eastern and Western Polynesia. The Papuans, however, appear by far the worst of the two races. In open day, and as an ordinary practice, human bodies have been cooked and eaten by the score and by the hundred. With the exception of the natives of Fij, the New Caledonians are among the worst cannibals of Polynesia. The interpreter on board the "Havannah," who had resided more than a year among them, assured us—and from the universal truthfulness of his statements we had no reason to doubt this—that at Shuaka, on the east of New Caledonia, one chief, in the space of thirty-five days, caused as many as seventy people to be killed for the express purpose of being eaten. He always alleged some crime against them; but it was well known that the real object was to obtain their flesh to eat. This chief is dead: he was pre-eminently cruel. His successor is equally cruel, but wants capacity for carrying it into effect. The natives, however, are everywhere beginning to feel ashamed of the practice. The influence of Missionary operations, and the visits of ships of war, are telling powerfully upon them; and if these means are continued, cannibalism may be as completely eradicated from the Western Pacific as it is now from New Zealand.

The *language* of the Papuan tribes in the Western Pacific is entirely distinct, both in vocables and structure, from the language of the Malay race in the Eastern Pacific. With the exception of the dialects spoken in Anciteum and Tana, so very little is yet known of the Papuan language or languages, that it would be unsafe to speak much dogmatically on any point. There are a few points, however, on which the languages of the two races may be compared, or rather contrasted.

From the Sandwich Islands to New Zealand, and from Tahiti to the borders of the New Hebrides, the language spoken by the Malay races is essentially one; but among the Papuans, in every island, and almost in every tribe, the language appears to be perfectly different from all the others. So great is the diversity among the Papuans, that the Western Pacific might with propriety be called *Polyglottia*, or the *Polyglot Islands*. It appears as if the progenitors of the present inhabitants had come direct from Babel, and that, having lived as Ishmaelites through all the intervening generations, their languages had never in any degree amalgamated. In the Malay language every syllable, and consequently *every word, ends in a vowel*, and double consonants are few, in some dialects none at all: in the Papuan dialects both syllables and *words often end in consonants*, and double consonants are not infrequent. In Malay the numeration, as in most languages, is *decimal*; in Papuan it is invariably *quintal*: after five, the series of numbers begin anew, something like five and one, five and two, &c. In Malay, the *nominative generally follows the verb*; in Papuan it seems to *precede the verb*. In the Malay, at least in the New Zealand dialect, the *passive form of the verb is by far the most common*. So strongly does the passive form prevail, that in regimen the adverb often assumes a passive termination. In Papuan, at least in the dialect of Aneiteum, the best known of any of them, the Missionaries have not been able to discover a single passive form in any of the verbs: *every verb is used in the active form only*. In Aneiteum there is a dual, if not also a trial number in the pronouns.

It is probable that the Papuan race in the Western Pacific were a much earlier migration than the Malay race in the Eastern Pacific, and that the language of all the Papuan tribes was originally the same; but migrating so early, as well as so far, from the original seats of civilization and true religion, they would bring but little of those conservative principles with them, and that little would soon, in their circumstances, be lost; and hence, living in their present scattered and hostile condition for hundreds, if not thousands of years, their language, with no literature and no intercourse to preserve its unity, and exposed so continuously to all the causes of change,

would undergo endless mutations, and thus its present diversities of form may be easily accounted for, even supposing that they all spoke originally the same language. The Malay race, migrating at a much later period, would bring more civilization with them; and, having had less time to lose what they brought, and to undergo the changes in language which time and separation invariably effect, are found everywhere speaking a language greatly changed in many of its details, but still essentially one in its great outlines.

In the New Hebrides no intercourse could have taken place among the inhabitants of the different islands, since they possess no canoes that could sail from one island to another, or only very rarely. In Erumanga it is doubtful if they had any canoes at all. Recently, since foreigners have been visiting them, a trade in canoes and other articles is springing up between them and the natives of Tana. On the other hand, there was always among the Malays a constant intercourse kept up, at least among the natives of the same group, which would preserve a similarity of language.

The Papuan language has also in itself more elements for producing variation than the Malay. It has more letters both simple and compound; and it allows syllables to end either in vowels or consonants, whereas the Malay confines all its syllables to a vowel termination. It is difficult even yet to ascertain the precise number of sounds in the Malay dialects, and quite impossible to do so at present in the Papuan; but this is not necessary for our present argument. It is quite certain that the Papuan has many more sounds than the Malay; and thus, from its containing more primary elements, and from its containing a double principle of syllabic termination, of combining vowels and consonants, the chances of change and variation, according to the established laws of combination and permutation, are vastly greater in the Papuan language than in the Malay.

If we consider the numerous elements of mutation in the Papuan tongue, the great isolation of the tribes, the few conservative influences, and the length of time these causes of change have been in operation, we need not marvel at the thoroughly polyglot character of the Papuan race; although

it is still highly probable that a farther investigation and a fuller knowledge of the various dialects would discover more numerous affinities and closer resemblances than a superficial examination has yet been able to discover.

There is, however, one most important advantage that the Papuans have over the Malays; that is, the ease with which they can pronounce, if not also acquire, English. From the sounds in their language being so much the same as in English, the Papuans can pronounce English words, and even sentences, with great ease and correctness; whereas all the Malays have to liquify the English words so much with vowels, that the original form and sound is nearly lost before they can enunciate them. At Tana we found a native who had been on board a Sydney vessel for a few years, and who spoke very understandable English, much more so than any New Zealanders I have ever heard, though, in general civilization, he was greatly behind vast numbers of them. A good many of the natives, both in the New Hebrides and in New Caledonia can speak a little English very intelligibly. Even at the Solomon Islands we found a native dressed in a check shirt, and who could speak a few words in English. Throughout the whole of these groups the natives manifest a great fondness for speaking English and for holding intercourse with those who speak the English tongue. We found scarcely a trace of the French language in any of the islands.

The Missionary operations in these islands have been very limited, and confined almost exclusively to the New Hebrides and New Caledonia. A deputation from the London Missionary Society visited the New Hebrides in 1839, when the Rev. John Williams and Mr. Harris were unfortunately killed by the natives of Erumanga. Subsequent deputations planted some fifty or sixty native teachers from Samoa and Rarotonga on Aneiteum, Tana, Erumanga, Fate, and other islands of the New Hebrides, and also on some of the Loyalty islands, the Isle of Pines, and New Caledonia, but a great number of these teachers have either died or been killed. In 1842 the Rev. Messrs. Nisbett and Turner, two of the London Society's Missionaries, were located, with their families, on Tana; but influenza, or some epidemic, appearing among the natives, after

ten months they were obliged to leave the island in consequence of the threatening conduct of the natives, who regarded them as the cause of the sickness and mortality, and no European Missionary has been stationed there since.

Within the last few years arrangements have been made between the agents of the London Missionary Society and the Bishop of New Zealand on behalf of the Church Missionary Society, in order to prevent any collision or waste of labour, that the London Missionary Society shall occupy the New Hebrides, and the Church Missionary Society New Caledonia and the Loyalty islands. The Bishop has been engaged in preparatory measures: he has brought several youths to his Institution near Auckland, and taken them back, after several months, to their own tribes, and is thus gaining the confidence of the natives, so that he may locate English Missionaries without danger to life or property.

In 1848 a Presbyterian Mission was established on Aneiteum, under the auspices of the London Missionary Society. There are at present two families connected with this Mission. There are five stations on the island; four are occupied by native teachers from Samoa or Rarotonga, and visited by the Missionaries who reside at the fifth. The population of the island is 3000. The progress of the Mission has been satisfactory and encouraging. The language has been acquired and reduced to writing; two primers have been printed; a good many of the natives can read a little; from one to two hundred attend public worship, and are under regular instruction; a taste for clothing is springing up; superstition is giving way to reason and truth; war is becoming less frequent; life and property are perfectly secure on the whole island, which can be affirmed of no other island in this group. There has been a sandal-wood establishment on Aneiteum for some years, in connection with which there are some respectable families; but the sandal-wood trade as a whole, admitting some honourable exceptions, has been conducted by persons of a reckless character, and has been fraught with most disastrous consequences to the natives of most of the islands where it has been carried on, and the evils inflicted have in many cases recoiled with fearful violence upon the heads of those

who inflicted them. But the regular visits of ships-of-war to these islands are likely to correct and prevent these evils.

A French Roman-Catholic Mission was established in Anciteum about three years ago, and also in New Caledonia somewhat earlier, where three stations were occupied by European Missionaries. But the Missionaries have been withdrawn and the stations abandoned, both in the New Hebrides and in New Caledonia. The French Missionaries are at present all located on the Isle of Pines. The French are very unpopular in Polynesia. Their doings at Tahiti, and the cavalier manner in which they treat the natives generally, have alienated the affections of the natives from them. The French do not appear to have the same facility for acquiring the language and gaining the confidence of the natives as the English. In almost all the groups in the Pacific natives of Britain and America are found living in security, having, after more or less difficulty, gained the confidence and acquired the language of the aborigines.

The principal permanent *difficulties* to be encountered in prosecuting missions in New Hebrides are, the number and smallness of the tribes, the diversity of languages or dialects, and the unhealthiness of the climate during the north-west monsoons, from November till April. During this season of the year fever and ague, and also the jungle fever of India, prevail among the foreigners, both white and coloured. This tendency to fever arises from the humidity of the atmosphere in the New Hebrides. It is a well ascertained fact that a dry air of ninety degrees is not so insupportable as a humid air of eighty degrees, and that a hot and humid atmosphere is unhealthy, although a hot air, when dry, may be very salubrious. In the one case the evaporation of moisture from the surface of the body is rapid; in the other case, from the humidity of the air, evaporation is impeded; moisture collects on the skin; a sultry, oppressive sensation is felt; and chills and fevers are usually in the train. There are also frequently violent thunder-storms, tremendous hurricanes, and, for weeks at a time, continuous torrents of rain. During these months the Missionaries are either laid up with sickness, or prevented, to a great extent, by the state of the weather, from prosecuting

their labours. A vigorous constitution, and the gift of tongues, would be indispensable qualifications in Missionaries to this group. The small tribes and the diversified languages must be met and dealt with as they best can; but the sickness of the climate may be remedied, and it must be remedied before any permanent good can be effected. New Zealand is only from a week to a fortnight's sailing from the New Hebrides; and were an institution established at or near Auckland, to which a part of the Missionaries at least could come from the New Hebrides, with a select number of youths, and where they could instruct them in English and other branches of learning during the unhealthy and hurricane months, which are the finest months in New Zealand, they could return and labour in the New Hebrides during the healthy and pleasant season there, which is the winter season in New Zealand. The most healthy might remain, in rotation, in charge of the Mission station during these months. Were arrangements of this kind made, the health of the Missionaries might be preserved as far as local influences could affect them, and, like birds of passage, they would have perpetual summer all the year round, and might prosecute their labours from year to year without any serious interruptions. The greatest objection to this plan would be the extra expense. It would involve at least double the expense of an ordinary Mission; but it would prove the cheapest in the end; each Missionary would do twice the amount of labour he could otherwise do; his health would remain more vigorous, and his life would be prolonged for a much longer period. The most difficult and expensive part of the plan would be to secure a suitable vessel at the proper periods. Two or three Missionaries, located on the extremities of such a group, can carry on their operations only under great disadvantages: it would require a band of men, furnished with every requisite, to make any thing like a deep, speedy, or permanent impression upon a race of men so savage and degraded. The Missionaries in Samoa recommended to the London Missionary Society some years ago, that if they wished to evangelize the New Hebrides, they must send at once ten or twelve Missionaries, and furnish them with every requisite for the field and the work, otherwise little

good could be done. The London Society could not at that time carry out the suggestion. Whether the Presbyterian Missions, in conjunction with the London Society, may be able to undertake operations that will tell upon the whole group remains yet to be seen. These remarks, however, are rather suggestions than matured plans. Where so little comparatively is known, farther experience might lead to both modifications and changes in the most feasible modes of present operations. It is probable, that by attending carefully to the laws of health, in the selection of sites and in the construction of dwellings, and by other preventive measures, less injury might be sustained from atmospheric influences, and more simple and efficient measures might be adopted.

The encouragements for prosecuting Missionary labours in the New Hebrides are, the naturally mild disposition of the natives generally, when their passions are not excited; their energy of character (they can apply themselves to labour with great vigour and perseverance); their aptitude for acquiring the English language; their present strong desire for Missionaries to live among them; and their confidence in the British character. This is shewn very fully by the readiness, and often eagerness, with which they embark on board of British vessels. A year or two ago the "John Williams" Missionary barque obtained three young men at Erumanga, and took them to Samoa. Last year, H.M.S. "Fly," Captain Oliver, brought a young lad, a chief's son, from Fate, who was taken back in the "Havannah." A second young lad, also a chief's son, was obtained by the "Havannah" at the same place in Fate, and two from Erumanga; and one from the Solomon Islands offered, yea, even entreated, to be allowed to go with a vessel, without any promise of being sent back. Some years ago a native of Aneiteum hid himself in a vessel from Sydney, in order to get away in her, his friends being against his going away, and the captain of the vessel unwilling to take him. The progress that has been made at Aneiteum is highly encouraging. To say nothing of the more direct and spiritual objects of the mission, there is now the most complete security for life and property throughout the whole island, and a greater degree of safety on portions of the contiguous islands, which

was not the case two years ago: it was with difficulty then that the Presbyterian Missionaries were allowed to settle.

In the event of an institution of the kind referred to above being established near Auckland, the youths brought to it would be in general the sons of chiefs and persons of distinction, and their influence on their respective tribes when they returned would necessarily be powerful, and would operate favourably in begetting a friendly feeling towards the persons and the interests of British subjects.

I have thus, at your Excellency's request, furnished a report of my Missionary tour through the New Hebrides. The interest that your Excellency takes in Missions generally, and the anxiety that you have expressed for the christianizing and civilizing of the natives of these islands in particular, as being so contiguous to New Zealand, are my apology for the length to which I have extended this report. I shall feel most happy if the information it contains shall be of any service in guiding you to apply successfully the means placed at your disposal for promoting the interests of humanity, civilization, and commerce in these islands; for elevating the degraded Aborigines, and securing the life and property of British and other subjects; and for aiding, in ways most competent for you, those benevolent and philanthropic Societies that are labouring to raise the Aborigines of the islands in the Pacific from their present state of barbarism and degradation, that they may enjoy all the blessings and advantages of pure and undefiled religion, scriptural education, and general civilization.

I have, &c.,

(Signed)

JOHN INGLIS,

Missionary from the Reformed Presbyterian
Church in Scotland.

Auckland, March 7th, 1851.

APPENDIX.

LIST OF CARDINAL NUMERALS.

MALAY DIALECTS—DECIMAL ARRANGEMENT.

	Sandwich Islands or Hawii.	New Zealand.	Samoan.	Tongan.	Tahitian.	Samoan in New Hebrides.			Queen Charlotte's.	Loyalty Islands.
						Nina and Futuna.	Fate.	Erumanago.		Uea.
One	Kahi	Tahi	Tasi	Taha	Tahi	Tasi	Tasi	Tasi	Tasi	Tahi
Two	Lua	Rua	Lua	Ua	Piti	Rua	Rua	Toru (1)	Rua	Lua
Three	Kolu	Toru	Tolu	Tolu	Toru	Toru	Toru	Vanga	Toru	Tolu
Four	Ha	Wha	Fa	Fa	Maha	Fa	Fa	Ringa	Fa	Fa
Five	Lima	Rima	Lima	Nima	Rima	Rima	No-kima	Wana	Rima	Lima
Six	Ono	Ono	Ono	Ono	Ono	Ono	Ono	Fitu	Ono	Tahi (2)
Seven	Hiku	Whitu	Fitu	Fitu	Hitu	Fitu	Vitu	Fari	Vitu	Lua
Eight	Walu	Waru	Valu	Valu	Varu	Varu	Varu	Iva	Varu	Tolu
Nine	Iwa	Iwa	Iva	Hwa	Iwa	Iva	Siwa	Te Kau	Siwa	Fa
Ten	Umi	Te Kau, or Ngahuru	Sefulu	Hongo-fulu	Huru	Tanga-furu	Nofuru, or Safulu	Huri	Nofuru, or Ngafulu	Lima

LIST OF CARDINAL NUMERALS—continued.

MIXED DIALECTS—DECIMAL ARRANGEMENT.					PAPUAN DIALECTS—QUINTAL ARRANGEMENT.				
	Solomon Islands.	Q. Charlotte's Islands.	Fiji.	Rotumah.	Aneiteum.	Tana.	Erumango.	Fate.	Malicola.
	Toro.	Vanikolo.							
One	E-ta	Riro	Dua or Kathi	E-sea	Titi	Liti	Saiwa	Sikei	Sikei
Two	Rua	Lal	Rua	Rua	Atu	Ka-ru	Dudu	Rua	E-á
Three	Olu	Raru	Tolu	Thol	Teset	Ka-har	Tesel	Folu	E-rá
Four	Hai	Rava	Va	Hak	Manwan	Ke-fa	Mentepat	Pati	E-yats
Five	Rima	Seli	Lima	Luim	Nekman	Ka-rirum	Sukrium	Lima	E-rima
Six	Ono	Ro	Ono	On	Titi	Liti	Masikai	La-tisa	Sukei
Seven	Vau	Ruambe	Vitu	Hith	Atu	Ka-ru	Sukrium-na-ru	La-rua	O-á
Eight	Varu	Imbitua,	Waru	Vasl	Teset	Ka-har	Sukrium-tesel	La-tolu	O-rá
Nine	Siwa	Taurine	Thiwa	Suir	Manwan	Ke-fa	Suk-rium-mentepat	La-futi	O-pats
Ten	Tangahoro	Endongolo	Chini or Jini	Sangul	Nekman	Ka-rirum	Alirvilum	La-lima	Sugeitf or Sngiap

LIST OF CARDINAL NUMERALS—continued.

NEW CALEDONIA—QUINTAL ARRANGEMENT.

	Bondi.	Balad.	Yengin.	Nikeite.	Murare.	Jitema.	Hunia or Isle of Pines.	Loyalty Islands.	Australian.
								Lifu.	Lake Macquaria.
One	Keu	Wa-nai	Hets	Sa	Ta	Tari	Ta	Chas	Wakol
Two	Alu	Wa-ru	Heluk	Baru	Polu	Peruri	Bo	Luele	Bulaura
Three	Tye	Wa-tyen	Heyen	Bati	Peni	Peniri	Beti	Kunete	Ngoro
Four	Va	Wa-trai	Pobits	Kana-fui	Peu	Peuri	Beu	Ekete	Yande (3)
Five	Inim	Wa-nim	Nim	Kana-ninu	Tangake	Tangan- gari	Tahue	Tibi	Yande
Six	Keu	Wa-nim-i	Nim-wet	Sa	Ta	No-tari	No-ta	Chalamen	Wakol
Seven	Alu	Wa-nim- ru	Nim-we- luk	Baru	Polu	No-peruri	No-bo	Luenge- men	Bulaura
Eight	Tye	Wa-nim- yen	Nim-we- yen	Bati	Peni	No-peuri	No-beti	Kunenge- men	Ngoro
Nine	Va	Wa-nim- bai	Nim-porit	Kana-fui	Peu	No-peuri	No-beú	Ekenge- men	Yande
Ten	Inim	Wa-rimge	Pain-duk	Kana-ninu	Tangake	Tuangan- gari	Dukowe	Luepi	Yande

LIST OF COMMON NOUNS.—No. 1.

MALAY DIALECTS.

	New Zealand.	Samoan.	Tongan.	Tahitian.	Samoan in New Hebrides.		Loyalty Islands.
					Nina & Futuna.	Fate.	Uea.
Sun	Ra	La	La	Ra or Mahana	Ra	Aro	La
Moon	Marama	Masina	Mahina	Marama	Marama	Marama	Masina
Star	Whetu	Fetu	Fetu	Fetia	Fatu	Masoi	Fetu
Heavens	Rangi	Langi	Langi	Ra'i	Rang	Rang	Langi
Rain	Ua	Ua	Uha	Ua	Ua	Ua	Ua
Lightning	Uira	Uila	Uhila	Uira	Ngulungulu	Uila	Uila
Thunder	Whatitiri	Fatitili	Faijijili	Patiri	Vashiri	Vatshiri	Fatitili
Wind	Matangi or Hau	Matangi	Matangi	Mihau	Matangi	Matangi	Matangi
Light	Ao or Marama	Malamalama	Malama	Malama	Ao	Ao	Aso
Darkness	Pouri	Poulinli	Pouli	Pouri	Ouri	Po	Pouli
Mountain	Maunga	Maunga	Mouanga	Mou'a	Ora	Tofu	Maunga
Land	Whenua	Fanua	Fonwa	Fenua	Fanua	Fenua	Manaha
Stone	Kowhatu or Kamaka	Ma'a	Maka	O'ai	Fatu	Fatu	Fatu
Water	Wai	Vai	Vai	Vai	Vai	Vai	Wai
Sea	Tai or Moana	Sami	Moana	Moana	Tai	Tai	Tahi
Bread-fruit	—	Ulu	Mei	Uru	Ulu	Kuru	Mi
Toro	Taro	Talo	Talo	Tari	Taro	Taro	Kalo
Cocoa-nut	—	Niu	Niu	Niu or Heare	Niu	Niu	Niu
Yam	—	Ufi	Ufi	Uhi	Ufi	Uf	Ufi
Canoe	Waka	Va'a	Vaka	Va'a	Vaka	Vaka	Vaka
Fish	Ika	I'a	Ika	I'a	Ika	Ika	Ika
Pig	Poaka	Pua'a	Puaka	Bua'a	Pakais	Puaka	Kuri
Fowl	Tikaokao or Heihe	Moa (4)	Moa	Moa	Moa	Moa	Moa

LIST OF COMMON NOUNS. No. 1—continued.

MIXED DIALECTS.			PAPUAN DIALECTS.						
	Solomon Islands		Fiji.	Rotumah.	New Hebrides.				
	Toro.				Anciteum.	Tana.	Erumango.	Fate.	Malicola.
Sun	Sina	Singa	Asth	Nangasuga	Meri	Kolpok	Alo	Meriu (5)	
Moon	Hura	Vulu	Hual	Nohou	Maukua	Tais	Atalang	Umbatsi	
Star	He'u	Kalokalo	Heth	Numiteu	Kumhao	Masi	Masei	Masei	
Heavens	Aro	Langi	Lang	Nohotang	Neai	Pokup	Insau	Ma-up	
Rain	Langi	Autha	Uas	Nuofa	Nesan	Mampi	Usa	Na-us	
Lightning	Hita	Liva	Mere	Nauainabit	Maruapen	Ame-taropis	Napila	Ube	
Thunder	Aroo	Kurukuru	Thu	Munuka	Karurua	Tarapis	Tefa	Rabù	
Wind	Loa	Athangi	Lang	Mteineup	Matangi	Matang	Nlang	Ne-an	
Light	Omea	Sarama	Tafa	Nathiat	Marareu	Ruerau	Nikapu	Nisar	
Darkness	Lodo	Sapongi	Mashum	Manepven	Pitau	Lueipo	Kapmat	Re-ei	
Mountain	Hane	Maumi	Solo	Methuan	Takuar	Iiua	Tof	Rarebru	
Land	Hahano	Vanua	Hanua	Nbeke	Tana	Narang	Launa	Na-on	
Stone	Ha'u	Fatu	Hoth	Nhat	Kapuri	Navat	Nemuka	Na-bar	
Water	Wai	Vai	Voi	Nuai	Nui	Nu	Nai	Nu-ei	
Sea	Asi	Vai-tui	Sas	Ntiop	Tasi	Untak	Ntasi	Na-ras	
Bread-fruit	—	Uto	Ui	Nuanma	Nemar	Tale	Kapua	Bunk-bunk	
Taro	Ba	Ntalo	Au	Ntalo	Nere	Netar	Ntale	Se-an	
Cocoa-nut	Niu	Niu	Niu	Neai	Nabuai	Noki	Nanu	Maru	
Yam	Uhi	Aufi	Uk	Nu	Nuk	Nùp	Nani	Nakim	
Canoe	Ora	Vangka	Tafang	Nelkou	Tata	Lo	Rarua	Nù-ank	
Fish	I'a	Aika	I'e	Numu	Namu	Namu	Na-ik	Na-ik	
Pig	Bo'a	Puaka	Puak	Pikath	Puka	Numpuka	Uaka	Brás	
Fowl	Kua	Atoa	Moa	Ntea	Lea	Netua	Toa	Beruch [ch is guttural.]	

LIST OF COMMON NOUNS. No. 1—continued.

PAPUAN DIALECTS—continued.

New Caledonia.

New Caledonia.					Loyalty Islands.			Australia.
	Balad.	Yengin.	Nikete.	Murare.	Tuanlu.	Mare.	Lifu.	Lifu.
Sun	Aat	Ningat	Ingaret	Ngi	Angi	Tu	Thú	Thú
Moon	Malok	Pue	Muea	Boi	Mue	Siakole	Teú	Teú
Star	Pidu	Tanik	Raamea	Vio	Ve	Watiakole	Uataseth	Thint
Heavens	Koema	Lepodang	Koe	Kua	Kua	Aoe	Thingaura	Ningotah
Rain	Ora	Kut	Nondulu	Uigi	Ri	Ele	Mani	Lelapu
Lightning	Ndan	Nink	Tonoho	Ivea	Inea	Uasisenet	Samek	Eah
Thunder	Ndyu	Nink	Nito	Tio	Treo	Nine	Hendring	Ending
Wind	Uru	Dan	Dewhang	Quia	Quie	Lengo	En	Eeh
Light	Aat	Mala	Kamia	Ngi	Chitia	Lane	Laihe	Thú
Darkness	Honbaat	Wudan	Ngari	Bidi	Mpune	Liti	Thint	Meti
Mountain	Yut	Ungduat	Bakwe	Uudu- ngweh	Ngwi	Et	Hernowet	Uet
Land	Dilis	Paatsh	Hoa	Ngweh	Ngweh	Not	Lapa	Meak
Stone	Boai	Paik	Sauki	Lu	Nu	Et	Eta	Ete
Water	Ue	Ue	Que	Qui	Ui	Ui	Tim	Tim
Sea	Koot	Hal-ue	Napue-que	Tyo	Ntyo	Tele	Nagetha	Nungethe
Bread-fruit	—	Chin	Onda	—	Ngeh	One	Uinon	Kenl
Taro	Kope	Io	Mwa	Ne	Nere	Ane	Inagath	Mangat
Cocoa-nut	Nu	Tep	Nu	Nyi	Ni	Anu	Ono	Ono
Yam	Upi	Ku	Ku	Ku	Ku	Koko	Koko	Koko
Canoë	Vaka	Uang	Kwa	Indyn	Nayu	Kui	He	Kalu
Fish	Nok	Nuk	Hota	Be	Mi	I	I	Winana
Pig (6)	—	—	—	—	—	Puaka	Puaka	—
Fowl	Ngan	Ialik	Maru	Maru	Nta	Titeo	Gutu	Arhe
								Tibbin

LIST OF COMMON NOUNS.—No. 2.

	MALAY DIALECTS.					MIXED DIALECTS.		PAPUAN DIALECTS.	
	New Zea-land.	Samoaan.	Tongan.	Tahitian.	Fate (New Hebrides.)	Uea. (Loyalty Islands.)	Toro or St. Christoval (Solomon Islands.)	Fiji.	New Hebrides.
Head	Upoko	Ulu or Ao	Ulu	Up'o	Sa	Ulu	Bau.	Ulu	Bau
Face	Mata	Mata	Mata	Mata	Mata	Faimata	Mang	Matano	Nakon
Hair	Huruhuru	Fulufulu	Fulufulu	Rouru	Roru	Laula	Waritu	Ndrau-ni-ulu	Nahn
Ear	Taringa	Talinga	Talinga	Tari'a	Taringa	Talinga	Haring	Ndalinga-na	Talingan
Eye	Kanohi	Mata	Mata	Mata	Mata	Faimata	Mang	Matana	Numtam
Nose	Ihu	Isu	Ihu	Ihu	Isu	Isu	Baris	Uthumu	Nangorun
Lips	Ngutu	Laungutu	Loungutu	Ngutu	Ngutu	Tempe ngutu	Ngo	Temhe-ni-ngus-u	Nangalon
Tooth	Niho	Nifo	Nifo	Niho	Nifo	Nifo	Liko	Mbate	Patin
Tongue	Arero	Alelo	Elelo	Arero	Limelo	Faka-alelo	Memea	Kume	Numenen
Neck	Kaki	Ua	Ua	'A'i	Papa	Ua	U'u	Ndomo	Konoau
Breast	Uma	Fatafata	Vakavaka	Ouma	Fatafata	Fatafata	Wepulu	Vakavaka	Naukwom
Back	Tuare	Tua	Tua	Tua	Nopua	Tua	Suri	Ndaku	men
Arm	Ringa-ringa	Lima	Nima	Rima	Naurima	Lima	Limaga	Linga	Takun
Hand	Ringa-ringa	Lima	Nima	Rima	Rerika	Lima	Haka	Linga	Narun
Knee	Turi	Tuli	Tuli	Turi	Patua	Tuli	Ruru	Nduru	Tako-narun
Foot	Waewae	Vae	Vae	Avae	Erika	Vae	Papanua	Arana	Napu-tuam
									Takoru-tuan

LIST OF COMMON NOUNS. No. 2.—*continued.*
PAPUAN DIALECTS—*continued.*

	New Caledonia.				Loyalty Islands.	Australia.
	New Hebrides.	Balad.	Yengin.	Nikete.	Murare.	Lifu.
Head	Erumango.	Wam	Paup	Balu	Oki	Itabit
Face	Nompunt	Boram	Karamai	Nekai-ameren	Nimbi	Talamek
Hair	Pilent	Polim	Pungai	Kumba	Unoku	Ipenbe
Ear	Naupilimpi	Yanim	Kenei	Nine	Nimea	Inangine
Eye	Talingan	Tevam	Tamai	Kanime	Embe	Alamek
Nose	Nimptu	Wandim	Wandai	Kone	Kume	Fithi
Lips	Waralang	Manwam	Wuai	Nawhai	Perangi	Nakue
Tooth	Alongan	Penwam	Paiawha	Paui	Endu	Inyu
Tongue	Nelongan	Kumem	Kuhemai	Kumerang	Nakone	Thinime
Neck	Noan	Nonge	Noe	Punani	Kokua	Nengawa
Breast	Emetekon	Wongeng	Buange	Mamain	Onuma	Mano
Back	Tan	Daum	Dai	Duli	Matu	Huta
Arm	Nokuben	Hiem	Hie	Meneni	Mi	Ime
Hand	Toru-nokuben	Yamwam	Kahalikim	Koheng	Nu-mi	Iwanaquem
Knee	Puneteron	Bangerim	Kanhim	Baheng	Tu-re	Luashi
Foot	Noan, Panon	Arakam	Kankahai	Nenahen	Nene-ve	Natapas
						Wollung
						Ngoara
						Kittung
						Ngureung
						Ngalkung
						Nukoro
						Tumbiri
						Tira
						Tullun
						Kulleung
						Wapurra
						Bulka
						Kopa
						Muturra
						Warombong
						Tinna

LIST OF VERBS AND PRONOUNS.

MALAY DIALECTS.			MIXED DIALECTS.
	New Zealand.	Samoa (7).	Tahitian.
I eat	E kai ana ahau	On te 'ai lava	Te 'ai nei au
You eat	E kai ana koe	E 'ai 'oe	Te 'ai na 'oe
He eats	E kai ana ia	Ua 'ai ia	Te ai ra o ia
I speak	E korero ana ahau	On te tautala	Te 'orero nei au
You speak	E korero ana koe	E tautala mai 'oe	Te 'orero na 'oe
He speaks	E korero ana ia	Ua tautala ia	Te orero ra o ia
I sleep	E moe ana ahau	E moe au	Te taoto nei au
You sleep	E moe ana koe	E moe oe	Te taoto ne 'oe
He sleeps	E moe ana ia	E moe ia	Te taoto ra o ia
			Solomon Islands.
			Inau ngau
			Ioe ngau
			Ia ngau
			Inan hate
			Ioe hate
			Ia hate
			Inau mauru
			Ioe mauru
			Ia mauru

LIST OF VERBS AND PRONOUNS—continued.
PAPUAN DIALECTS—continued.

	New Hebrides.		New Caledonia.	Australia.
	Tana.	Fate.	Yengin.	
I eat You eat He eats	Ianak amani Iknak amani Indre amani	Ku fami A fami I fami	Wo hue Do hu Ili hue yek	Tatan bang Tatan bi. Tatan noa, or boan- toa
I speak You speak He speaks	Ianak ini Iknak ini Indre ini	Ku pesi A pesi I pesi	Wo pe Do pe Ili pe yek	Wiyan bang Wiyan bi Wiyan noa, or boantoa
I sleep You sleep He sleeps	Ianak apari Iknak apari Indre apari	Ku muturu A muturu I muturu	Wo kulang Do kulang Ili kulang yek	Birikin bang Biriki bi Birikin noa, or boantoa

THE TENTH COMMANDMENT.

ANEITEUM—NEW HEBRIDES.

Tak hasiram aiek neom ou atimi ablamnem unium, tak asiram ehgan atimi ablamnen unium, im naheca atai-
maig ou un, mi naheca atahaig ou un, im kurimatau ou un, mi nifo ou un, im nijih itai ou un.

NOTES TO THE APPENDIX.

IN the foregoing lists the consonants have the same sound as in English, with the exception of the double consonant *ng*, which is pronounced, not as is usually done in English, as if spelled *ng-g*, as in *finger*, pronounced *fing-ger*, but simply *ng*, as in *singer*, pronounced *sing-er*; but as in the Malay dialects every syllable ends in a vowel, *ng* is joined to the beginning of the syllable, not to the end. Thus *Rangi* (Heaven) is divided *Ra-ngi*.

The vowels are sounded as in French or Italian, or in Latin, as pronounced in Scotland and on the continent of Europe; thus—

A as *a* in "Father."

E as *e* in "There."

I as *e* in "Me."

O as *o* in "So."

U as *u* in "Full."

Ū as obscure *û* in the French language, or as obscure *û* in the Scotch word *Kûtekin*, "gaiter." Every vowel is sounded.

Of the preceding lists the Tahitian and Australian were obtained from the Rev. L. E. Threkeld, Sydney, formerly Missionary, first in Tahiti, and afterwards at Lake Macquarie. The Samoan from the *Samoan Reporter*, and the Rev. A. Macdonald, Auckland, formerly of Somoa. The Tongan, from the Rev. S. Rabone's Tongan Lexicon. In list of nouns, No. 1, *Nina* and *Futuna*, *Fiji*, *Rotumah*, *Aneiteum*, *Tuanlu*, *Mare*, and one of *Lifu*, were extracted from a paper by the Rev. G. Turner, in the *Samoan Reporter* for March 1847. In No. 2, *Uea* and *Fiji* were from the interpreter on board the "Havannah," who also supplied me with *Uea*, No. 1, and other collateral information. In the numerals, *Fiji* and *Rotumah* are from the *Samoan Reporter*, and *Hawaiian* from *Hawaiian* statute laws. All the rest I obtained from the lips of natives.

In the whole of the lists the Malay may be regarded as in general correct; but in the Papuan dialects, from the differences being so many and so great, and the languages being so little previously known, an approximation to accuracy is all that can be expected. This, however, is sufficient for the purpose of comparison. The most superficial examination shews the essential unity of the Malay, and the endless varieties of the Papuan, the resemblance in the Papuan dialects being in structure, not in words.

The connection traceable is vastly fainter, and immeasurably more remote than is seen in the Malay. The causes of change must have been much longer in operation.

Notulæ (1) *Erumango*.—The Erumangos, who use the Malay numerals, have omitted the *second*, raised the following seven one place respectively, and supplied the ninth by one of the words used to denote the tenth. (See *ten* in New Zealand List.)

(2) *Uea*.—The Malay inhabitants of Uea, in the Loyalty group, originally a colony from Uea, or Wallis Island, have retained the numerals of their Malay ancestors up to *five*; but they have adopted the *quintal* arrangement of their Papuan neighbours, and discontinued the use of the Malay numerals above five, thus falling back in civilization.

(3) *Australia*.—The natives of Lake Macquarie have no names for the numerals above three. To express four, they hold up the four fingers of one hand, and exclaim *yande* thus; and to express five they use the same word, but hold up both the four fingers and the thumb. What appears singular is, that their language is defective in nothing else: in all other respects it is full and copious. In Western Australia, also, the natives count only to four.

(4) *New Zealand*—*Moa*.—While Owen, Mantell, and the *Savans* of Britain are astounding the world, enriching science, and gaining celebrity by exhibiting the colossal bones and monster egg-shells of the extinct *Moa*, which they have dignified and made dreadful by the high-sounding Greek name *Dinorinis*, it is interesting and gratifying to the philologist, to find, that in all the Malay dialects of Polynesia, *Moa* is the name given to common poultry. The proper name *Samoa* signifies, according to some, “sacred fowl”—*sa* “sacred,” *moa* “fowl.” This etymology, I understand, is incorrect; “sacred fowl” would be *Moa-sa*. *Moa* was the name of a great chief, or of a powerful tribe; *sa* is a prefix signifying “belonging to.” *Samoa* would therefore mean the people or followers of *Moa*; and as these occupied the most of the group, it was an easy and natural process to transfer the name from the people to the islands. The fact that the natives of New Zealand have a specific name for this extinct fossil bird shews that its disappearance must have been very recent. The universality, also, of the word among all branches of the Malay Polynesians is somewhat curious, and may merit farther investigation.

(5) *Malicola*.—*U* and *R* have a peculiar sound in *Malicola*. *U* has the obscure French sound, or the Scotch sound of *ou* or *oo*

very strong. *R* is pronounced after *B* with a strong trill, as if three *R*'s were pronounced at once. *Ambrim* is pronounced as if written *Ambrrrr*. Captain Cook observed this peculiarity of the *R*. It is somewhat analogous to the *burr* in the Northumberland dialect.

(6) *New Caledonia—Pig*.—The New Caledonians have no pig, and hence no name for this animal. From the name being the same in all the groups, Malay and Papuan, and so nearly allied to the Spanish word *puerca*, "a hog," it is probable that pigs were introduced by Mandana or Guiros, when they first discovered these groups, and that the name has spread with the animal. Captain Cook left a bull and a cow at several of the groups which he visited. The natives, not understanding the principles of our language, applied both names to each animal in a slightly corrupted form; and now, in most of the groups, the name for *oxen* or *beef*, is *bull ama cow*.

(7) *Samoan, &c.—K*. In Samoan and Tahitian the *k* is generally dropped, both in the beginning and middle of words; thus *hoe*, *kai*, *korero*, *ika*, in New Zealand, become 'oe, 'ai, 'orero, 'i'a, in Samoan and Tahitian; but the want of the *k* is supplied in the middle of words by a break, and in the beginning by a sharper pronunciation of the vowel. In Hawaii *K* is substituted for *T*.

The *Malay* language, simple, smooth, and essentially one, is more aggressive than the *Papuan*. The Malay is to a small extent become the conventional language of the Papuan tribes in the New Hebrides, the Loyalty Islands, and New Caledonia. But were there much intercourse with any well-conducted English-speaking community, from the ease and readiness with which they appear to acquire and pronounce English, it would spread rapidly among them, furnishing a key to priceless treasures, and carrying the elementary but undying principles of true religion, sound knowledge, and lasting prosperity and happiness.

(Signed)

JOHN INGLIS.

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ADDRESS
TO THE
ETHNOLOGICAL SOCIETY OF LONDON,
DELIVERED AT THE ANNIVERSARY, 14TH MAY, 1851,
BY
VICE-ADMIRAL SIR CHARLES MALCOLM,
PRESIDENT.

It is now three years since you were addressed from this Chair by your late President, Dr. Pritchard, whose character and whose labours have been so truly and justly drawn by his friend Dr. Hodgkin in Vol. II. of our Transactions. The loss of that good and eminent man to our Society has been indeed great. We all felt, that as long as we were under his guidance Ethnology must expand in all its branches. He was ever ready to listen to the facts or theories of all men, and also ready to admit with candour, or, if necessary, to oppose with firm but mild argument. As yet no one has come forward to fill his place. I was requested to be your President again. I accepted the honourable office with reluctance, and with an understanding that I was to retire as soon as you could find some eminent Ethnologist to take the Presidential Chair. I hope that event may not be far distant, as our troubles and difficulties are fast disappearing under the good management of your Council, who have brought us into smooth water. In this they have been very materially assisted by Mr. Cull, your very able Honorary Secretary, and your excellent Treasurer, Dr. Camps, who will have the satisfaction of placing before you a fair account of the funds of the Society.

In attempting briefly to sketch the progress of Ethnology since Dr. Pritchard's Address to you in 1848, it may be well, in the first place, to notice those authors who have treated of this science generally. It is evident, from the very great extent of the subject, that a vast amount of research, and great variety and accuracy of knowledge, are essential to the completion of such a task, and that there are, comparatively, few

individuals competent to undertake it. No stronger evidence can be adduced for the truth of this assertion than the great work of our late President, Dr. Pritchard: a work, to use the language of Dr. Latham, "which even those who are most willing to defer to the supposed superior attainments of continental scholars, are not afraid to place on an unapproached eminence in respect to both our own and other countries. The fact of its being the production of one who was at one and the same time a physiologist amongst physiologists, and a scholar amongst scholars, would have made it this, since the grand ethnological desideratum required at the time of its publication was a work which, by combining the historical, the philological, and the anatomical methods, should command the attention of the naturalist as well as of the scholar." But coming even from such hands, the work was necessarily incomplete; and had it been in his power to trace the outlines of its foundation with indisputable accuracy, there would still be no discoverable limit to the superstructure to be placed upon it. But it will be no disparagement of the great Ethnologist whom we have lost were extended researches, and more accurate information, to suggest reasons for questioning the accuracy of some parts, even of the outline. In fact, the example of his own researches would lead to such a result.

It would not have been unreasonable to expect that another truly great man, who has already largely contributed to Ethnological science; who still survives, though at a very advanced age; and who, in addition to combining the philosopher with the philologist, the historian and the physiologist, has super-added the singular advantage of having personally examined numerous different and distant races in their own abodes, would have given us his views upon the human race as a whole. You will already have understood that I am speaking of the great Humboldt. The subject of Man has not been omitted in the plan of a work so comprehensive as "*Cosmos*;" but, from the very circumstance that Ethnology is not the special object of the work, it is not taken up at any great length, or in detail. Humboldt, without adopting any classification as yet established, recommends the exact study of the several families of mankind into which, without submission to

any theory or authority, the human race may be readily assumed to be divided.

In our own country, four works have appeared on Ethnology in general. They differ so widely in their methods of treating it, that it would be in vain to draw any comparison between them.

Without attempting any thing like an analysis of either, I shall offer a few observations respecting each. The work of Colonel Hamilton Smith, published in 1848, is an attempt to present to the public a concise view of the whole subject in a small, cheap, and popular form. The author appears to have devoted many years to the study and accumulation of his materials, and to have taken a very just view of the requirements of Ethnology.

In his Introduction he says, "To investigate the history of man upon zoological principles, and to apply them to the phases of his various historical aspects, requires extensive researches in a multitude of directions—physiological, linguistic, religious, traditional, geographical, and migratorial; for it is by their mutual comparison that light is thrown on many points which, without these means, would remain entirely unknown." To a considerable degree the work appears suited to answer the purposes for which it has been published. It contains a great amount of valuable materials, presented in a sufficiently interesting form; it makes no pretensions to great originality, either in the facts which it details, or in theories employed to connect them; and, what is of no small importance in a work designed to be popular, it may be regarded as clear of giving offence, either to those who justly reverence scriptural Ethnology, or to those naturalists who pursue their researches without reference to it. An interesting portion of Colonel Smith's work is devoted to the consideration of the most ancient remains of human osteology; and he notices some instances in which the bones of man have been found in conjunction with those other mammals, either altogether extinct, or which have long since ceased to exist in those parts of the globe in which the remains have been found.

The next work which I shall mention is that of Dr. Knox, published in the course of last year. It consists of twelve

lectures, and appears to contain the substance of several courses of popular lectures which the author has delivered in different parts of the kingdom. Although it takes a very comprehensive view of the subject, it is, as the author himself has styled it, merely a fragment. To say that it is conceived and executed in a bold and striking manner, truly, but imperfectly, describes its character. It doubtless contains vigorous and masterly passages. Unlike the work of Colonel Smith, which I have just noticed, the views of the author differ so widely from those of some other Ethnologists, and more especially from those who desire not to clash with the records of Scripture, that the work, if taken up, will probably, by many, be laid down again either with aversion or dread; and those who took offence at Lawrence will probably be doubly offended with Knox.

If, instead of giving way to this feeling, the reader will carefully peruse the work, he will discover in it many important suggestions, and many facts related by an able observer, whilst, with reference to those passages which he would deem objectionable, he will find the fragmentary character most conspicuous; and that where the author leads his reader away from previously received opinions, he brings him to a sort of *cul-de-sac* in his progress to that which he would substitute for them. I shall only notice some of the more prominent points of the work. Dr. Knox assumes that there are many races of men; that many parts of the earth have their own peculiar and proper races, as much as their Floras and their Faunas; that no new race or permanent variety can be produced by intermarriage, but must become extinct, without renewal from each of the primary stocks; that no race can properly thrive, except in the region to which it by nature belongs; and that, consequently, the European races which are displacing, or have displaced, the Aborigines of the great continent of America, notwithstanding their present rapid increase in numbers, cannot long continue to multiply, or even maintain their present population, without renewed accessions from the Old World.

The imperfect, unsatisfactory, and often conflicting testimony of history, as well as of tradition, appears to have led

Dr. Knox to place the value of both far below the truth; and despairing of tracing man by their aid to one or more points of origin, he at least inclines to the opposite mode; and, calling in the aid of transcendental anatomy to trace his evolution, and that of all those beings which participate with him in the common attribute of animal life from organic molecules susceptible of unlimited development, yet liable to arrest, but endowed with a tenacity of life enabling them to survive all the local and general catastrophes of our planet, and to accommodate themselves to existence either in air or water. I will not here enter into the grave discussion of so vast a question, but will merely observe that there is a curious coincidence between this extreme of transcendental philosophy and the crude speculations of some savage tribes, whose fancy has supplied the place of the history or tradition which they have lost. Thus, while the transcendental anatomist, who thinks that he is in possession of the highest discovery to which human intellect has yet attained, would trace man to an inferior animal, the North-American Indian does the same, and tells us that the first woman was metamorphosed out of a partridge.

Amongst the remarkable sketches of the characters of particular races which the Doctor has drawn may be mentioned those of the Celt, of the Saxon or Scandinavian, and of the Sclavonian, although the reader will be inclined to think that some of the features are drawn in caricature. Whilst their general accuracy is attested by the fulfilment of some of the predictions which his views induced him to hazard, it is somewhat humiliating to observe, that even those races which plume themselves on the highest degree of intellectual superiority participate in common with the lowest, if they do not actually surpass them, in that inveterate antipathy of race to race, which for centuries has proved a bar to their amalgamation where the extermination of the weaker has not been effected. Some of the peculiarities of race which the Doctor has delineated are of great practical importance, and the careful study of them is well worthy the consideration of the Missionary, the legislator, and the politician.

The next work to which I must call your attention is of a

widely different description. I allude to *the Natural History of the Varieties of Man*, by our own associate, Dr. Robert Gordon Latham, of whom we may be justly proud, since there is probably no one in this or any other country who approaches near him in that particular philological research with which the volume in question is largely enriched, and of which specimens have again and again been laid before you in his valuable communications on the languages of America, Western Asia, and Australia.

It is obvious that so many different classifications of the varieties of mankind may be made with very trifling difference as to their peculiar merits, that I am less disposed to dwell on the modifications of this kind which Dr. Latham has introduced into his work, than to notice its peculiar merits, which essentially consist in the extensive philosophical and minute application of the linguistic test to the affinities and distinctions of the several groups of the human race.

But though the application of this test is undoubtedly Dr. Latham's forte, he has by no means neglected the geographical, the anatomical, the historical, and other circumstances, which it is indispensable to take into consideration in an attempt to arrive at any thing like a thorough and accurate knowledge of the many difficult points which a systematic work on Ethnology must necessarily include. It is quite impossible to offer an epitome of such a book, which will doubtless be regarded as indispensable to the future cultivators of our science.

The last book of a general character of which it remains for me to speak, is the splendid volume of *the Races of Man, and their geographical distribution*, by Dr. Charles Pickering, member of the scientific corps attached to the United States' *Exploring Expedition*. Although the author is an American, and in the service of his Government, the work is published in London. Dr. Pickering had prepared himself for this highly interesting and important voyage by careful ethnological study; but his views regarding the varieties of the human race were materially modified by his own personal observations. He reduces the varieties of man which came under his investigation to eleven, namely, two white, three brown, four blackish brown, and two black.

It was unquestionably a great advantage which the author enjoyed in being able, in rapid succession, to see the several varieties of men in sufficient number, and in their own *habitat*, whilst the impressions which each produced were fresh in his mind; but what is more than this, he had, on different occasions, the opportunity of making the direct comparison, as individuals of several different races were included in the ship's company.

In many instances vocabularies were collected, and the presence or absence of particular customs, utensils, and the like, were carefully noted, as throwing light on past or still existing communication. The number and execution of the plates claim particular notice and commendation, since they add much to the lasting value of Dr. Pickering's contribution to Ethnology.

Of the labours of a more limited and local character by which Ethnology has been enriched, I must mention a few, without presuming to state that others of value and merit may not be passed over in silence. Since the Address of Dr. Pritchard, Botta's large work on the Discoveries of Khorsabad has appeared, and Layard's two volumes have been published in England, as well as the selection of one hundred plates from his portfolio. These have made known to us the architecture of the Assyrians, and, still more intimately, their sculpture: their architecture, in fact, seems to have been almost wholly sculptural, bare walls, unadorned with figures, not having been found. The materials furnished by Botta and Layard have been methodised by Fergusson, who, aided by well-founded conjectures, which have every probability in their favour, has restored the primæval edifices of the Assyrian monarchs in a way which cannot be very wide of their ancient condition. Another valuable contribution has been the inscription from Nimrud, Kozunjik, and [*Karamlis*?], published by the British Museum, which are found by Colonel Rawlinson of great use in illustrating his memoir on the language. Besides the Nineveh marbles, brought home since the last Address, many bricks have been brought from Niffer, Warka, Sinkeret, Umgheir, and other places in the valley of the Tigris, containing new names of kings—among others, the name of Cambyses. We

hear also from Layard of a discovery of a large chamber filled with small tablets covered with inscriptions, apparently the records of the empire. Several large boxes of these slabs were packed up and sent away, and they are anxiously expected. A few tablets, about a hundred perhaps, each in size $2\frac{1}{2}$ by 2 inches, now in the British Museum, appear to be orders for payment of moneys, under the names of the last native kings of Babylon, Nebuchadnezzar, Nabopolassar, and Nabonidin, and of their Persian successors, Cyrus and Cambyses. The money is expressed by weight of gold and silver, and the money order, or "treasury bill," is attested by the names of the proper officers. The diggings at Susa are only begun. One inscription has reached us, a few lines only, in Cuneiform Babylonian so far as the alphabet is concerned, but the language is quite distinct from any of those with which we are acquainted.

One fragment of brick received contains a few well-engraved characters of the Semitic class, but not enough to make any complete word.

Several pateræ of clay or earthenware were brought from Babylon by Colonel Rawlinson, which are covered with long inscriptions, drawn in a sort of ink or pigment with a pen or pencil. The character is very similar to the Palmyrene, and several Hebrew words are found upon them; but the language is certainly not Hebrew. Some investigation is going on about them.

A large inscription in the regular Assyrian character was found in Cyprus, and has been purchased by the king of Prussia: it is now in Berlin, and a cast of it is in London. It has been read by Colonel Rawlinson.

The Median language has been again investigated by De Sauley. My friend, Mr. Norris, does not think he has added any thing to Westergaard. The language is certainly not Indo-Germanic, notwithstanding Dr. Pritchard's conjecture in the *Ethnological Journal*, Vol. II. p. 129. But Dr. Pritchard may be right in his conjecture *essentially*: the fact may be, as Mr. Norris believes, that the language in question is not Median.

With regard to the living races of Asia we have the

very important researches on the Aborigines of India, by Major-General Briggs, E. I. C. S. The series of papers which this able and accomplished officer has read at various times before this Society on the aboriginal people of India are the result of personal knowledge and patient investigation, whilst holding high civil and political appointments in Candesh and Satara, two provinces amongst whose mountains these tribes reside to this day. Since his return to this country he has devoted much time and labour to arranging and enlarging his history of this singularly interesting people particularly so to Ethnologists.

The following brief abstract from an unread paper of General Briggs's in my possession will give you a fair outline of the author's opinion on this subject.

"Until a comparatively late period, we have been taught to believe that the Hindees comprised the primæval race of that vast portion of Asia lying between the Belooche and Solymany mountains on the west, the Himalayas on the north and east, on the south bounded by the sea by an extent of more than 1500 miles of coast from the delta of the Indus to the delta of the Baramputra. I have shewn, and, I believe proved, in the series of papers read before this Society, that the mountain ranges and the wide-extended jungles of Central India are to this day inhabited by various tribes entirely distinct from the Hindees, and who, we believe, are the aboriginal race of India, driven into these fastnesses by their conquerors the Brahmins who came from the north-west.

"In a close comparison of the several accounts given by these people, it is found that, although separated into tribes, hundreds of miles asunder, they have everywhere the same religion and institutions, the same peculiarity of manners, in all of which they differ from any other race in India, while they resemble one another so closely, that it is impossible to deny that they have one and all sprung from a common stock, and that not Hindee. I agree with the late Colonel Agnew, the late Captain Newbold, and Sir Richard Jenkins, that the tribes of Goudwana and the Nalla mountains in the Madras ceded districts possess the physiognomy of the Mongolian

tribes, who occupy the villages of Bootaun and part of the Burmese mountains. This circumstance would point out those regions as the source from whence the Aborigines came."

The General proceeds to shew why those languages to the north of the tropic are mixed with many Sanscrit words, but proceeding to the south they are found less and less. All this is fully shewn in his papers, which will, I trust, appear in our next Journal.

The Author thus proceeds, "These physical and philological investigations have cost me some years of laborious application to come at the conclusion that these Aborigines, though an unlettered people, were once the exclusive possessors of India; that they gave names to extensive kingdoms; that they were a maritime people, and carried on an extensive trade with the Indian Archipelago: indeed, to me it seems more than probable that they not only occupied many of those islands, but even passed into Australia; a theory that every day derives strength as we become better acquainted with the natives of that extensive region."

It is to the existence of this Society alone that we are indebted for the full discovery of the identity of all the Aborigines of India; and it is to the peculiar institutions of caste of the Hindees that we are able so distinctly to trace the separation from the conquerors for so many ages; whereas, in Europe, races have become so blended, that the Caucasian is no longer distinguishable from the Mongolian, though both have occupied the fairest portion of the temperate zone.

On the continent of Europe some little addition has been made to the Ethnology of France and Spain by the work of Francis Michel, "*Sur les races maudites de la France et de l'Espagne*;" by which term are meant the Cagots of the South of France, the Coqueux of Brittany, the Collibertis of Armis and Bas-Poitou, the Cretins of Majorca, the Marrons of Auvergne, and the Vaqueros of Asturias.

In our own country a valuable and elaborate work has been published in elucidation of the Ethnology of North Britain, viz. the *Archæology and Pre-historic Annals of Scotland*, by Daniel Wilson. He divides the space of time over which he

extends his researches into four periods—the Primæval, or Stone period; the Archaic, or Bronze period; the Teutonic, or Iron period; and the Christian period. With regard to the first, almost the only facts which remain for our information are the sepulchral tumuli, and the crania and other bones which they contain, with the rude articles of manufacture by which they are accompanied.

For the remaining periods the materials are much more copious; but even for the second period sepulchral mounds and their contents afford the most important data.

In examining these objects, it is impossible not to be struck with their resemblance to the rude works produced by the aboriginal inhabitants of other parts of the world, whether still existing, as in some parts of Australia, or only known by the relics which they have left, as in various parts of the northern hemisphere.

As the author proceeds, and even comes down to the historic period, the number and variety of objects are greatly increased; and some of them are remarkable, not only for their richness, but even for the elegance of their design and execution. Yet even for some of these, counterparts, scarcely inferior, may be found in the rich carvings of South-Sea islanders and North-Western Americans.

Before quitting the Ethnology of our own country, I must remind you of the valuable paper which you have recently heard on the sepulchral mounds of this country, and the crania which they contain, by our careful and pains-taking friend, Dr. Thurnham; nor can I omit to mention, though as yet only orally received, the careful and ingenious researches of one of our own Fellows, Mr. Saul.

The Ethnology of the sister isle, rendered difficult by the exuberance of traditional fiction, has been studied and written upon by Mr. Wyld; and the excellent Curators of the Royal Irish Academy have been very successful in collecting the rich but rude specimens of early Irish art.

In America the Smithsonian Institution has published a quarto volume, with ample illustrations, containing the records of a great amount of archæological research, which cannot fail to throw important light on the pre-historic periods of Ame-

rica. When we consider how rapidly the aboriginal successors of those by whom these ancient works were produced are, in our own times, disappearing from the land of their forefathers, any attempt to preserve their characteristics from oblivion must be regarded as a valuable contribution to American Ethnology, and a laudable example, worthy of imitation in other parts of the world. It is this consideration which induces me here to notice the vast collection brought together by G. Catlin, who has devoted to it many years of toil, and thousands of dollars of expenditure. Although not so recently formed as legitimately to fall within the range of this retrospect, I feel that I may be well excused from alluding to it, since it has been recently afresh arranged for exhibition, which, together with the additions which it has received, renders it peculiarly worthy to become an object of general interest and attraction, not merely to the lovers of Ethnology, but to the general public. This collection has not been lost sight of by the Council of your Society; and hope has been entertained that it may, in some mode or other, be retained in this country to enrich our great national Museum, in which, at present, the Ethnological department is not on a par with the extent and resources of the empire. I may here be allowed to quote a passage from D. Wilson, the learned author of the work which I have already noticed.

“In nothing is the want of the intelligent co-operation of the kindred sciences which bear on the study of antiquities more apparent than in the present state of our public collections. The British Museum contains the elements of a collection which, if arranged ethnographically and chronologically, would form the most valuable school of popular instruction that Government could establish; and no other country rests under the same manifest duty to form a complete ethnological museum as Britain: with her hundred colonies, and her tribes of subject Aborigines in every quarter of the globe, losing their individuality, where they escape extinction, by absorption and assimilation to their European masters. Were an entire quadrangular range of apartments in the British Museum devoted to a continuous systematic arrangement, the visitor should pass from the ethnographic rooms, shewing man

as he is still found in the primitive savage state, and destitute of the metallurgic arts; thence to the relics of the Stone period, not of Britain or Europe only, but also of Asia, Africa, and America, including the remarkable primitive traces which even Egypt discloses. To this would then fitly succeed the old monuments of Egyptian civilization, the Nimrud marbles, the sculptures of India, and all the other evidences of early Asiatic arts. The Archaic Greek and colonial works should come after these, followed by the masterpieces of the age of Pericles; and these again by the monuments of imperial Rome. Thus, by a natural sequence, we return to British remains; the Anglo-Roman relics piecing on, like a new chapter of European history, at the point where our island first appears as a part of the old Roman world, and followed in succession by our native Anglo-Saxon, Scandinavian, Norman, and mediæval antiquities. The materials for all this, if we except the primitive British relics, are already acquired; and while, to the thousands who annually throng the Museum in idle and profitless wonder, this would at once convert into intelligible history what must now be, to the vast majority of visitors, a confused assortment of nearly meaningless relics, even the most profound scholar might derive from it information and pleasure, such as would amply repay the labour of arrangement."

COMMANDER R. E. FORBES, R.N. — Ethnology is much indebted to this young officer. We most of us heard with deep interest his paper "On the manners and customs of the Kingdom of Dahomy," in which he draws so life-like a picture of the king, his ministers, his nobles, his amazons, his army, and the priesthood, with all their horrid rites steeped in the blood of man, and worship offered to their gods. The slave-trade, with all its appalling results—appalling to all but the slave-dealer, the slave-carrier, and the slave-receiver. Whilst he depicts all this with a master's hand, it may at the same time be seen that, personally, the king, with many of his chiefs, who are thus barbarously cruel, are less so from nature than from long custom, to which they have been habituated from early childhood. What a blessing will fall upon that man who can introduce

Christianity amongst them ! Its truths, if once planted in their minds, would drive the slave-dealer from their land, with all the attendant horrors of that trade, and abolish, once and for ever, human sacrifices from their altars. Duncan, the soldier-traveller, in many respects agrees with Captain Forbes, particularly as to the character of the king and the customs of the court.

It was to Commander, then Lieutenant Forbes, of H. M. Ship Bonetta, as attested by Mr. Roberts, the President of Liberia, and the Rev. Edward Jones, senior Missionary, that we owe the discovery of a written language of the phonetic order on the West Coast of Africa, called the Valiei or Vei tongue, which was invented about twenty years ago by eight men. It was, however, nearly lost, for the Spanish slave-dealers at Gallinas, seeing its rapid progress, became alarmed, and, by intrigue and bribes, threw the country into a state of anarchy. The official report of this discovery was sent by the Admiralty to the Royal Geographical Society. The subject was taken up with enthusiasm by that able expounder of all that seems hidden in ancient or modern languages, Mr. Norris, of the Royal Asiatic Society. *Vide* his paper on the subject in the Royal Geographical Society's Journal, Vol. XX.

CAPTAIN J. S. ERSKINE, H. M. S. HAVANNAH. — The official report of this intelligent officer was sent by the Admiralty to the Royal Geographical Society; and from that document I have been permitted to make some extracts connected with our science. It is the narrative of a tour of inspection through the South-Sea Islands to see that the natives inflict no wrong on our countrymen, and that they suffer none from our traders. It was between June and October 1849 that Captain Erskine visited the Navigators', Friendly, Feejee, and Loyalty Islands, the New Hebrides, and New Caledonia. Captain Erskine has given a succinct view of the present state of these islands; and as, from their contact with Europeans, they are now in a state of transition from barbarism to civilized habits, they have become peculiarly interesting to the ethnologist. The following story, taken from Captain Erskine's narrative, will mark a period when cannibalism prevailed.

“Although the murder of shipwrecked persons is supposed to be a religious rite, there can be no doubt that the desire to eat the bodies is the principal cause of its continuance, human flesh being esteemed above all other kinds of food. About the end of July, three weeks before the arrival of the *Havannah*, fourteen women belonging to a neighbouring town, with whom no war existed, had been stolen from the reefs, whither they had gone to seek shell-fish, and brought to Bau, to entertain the people of a tribe who had arrived there with their periodical tribute. The Missionaries, Messrs Lyth and Calvert, were absent from Vewa at the time, but their wives immediately crossed over to Bau, and, in the most daring manner, forced themselves into the house of Tanoa, the Zattier of Thakamba, a piece of sacrilege for women to attempt, and begged the lives of these poor wretches. Ten were already sacrificed, two of them in the hearing of these heroic ladies; but the lives of the remainder were granted to their entreaties.

“On my visit to Bau, I was shewn the remains of the bodies suspended to trees, and the ovens in which they had been cooked by some of the persons in whose behalf this feast had been prepared, with evident surprise on their part that such a sight should excite horror and disgust. . . . A favourable sign had shewn itself on the visit, just mentioned, of the Missionaries: they were followed to their canoe by crowds of women, thanking them for their interference; a feeling which, a year or two ago, these poor creatures durst not have expressed.”

Cannibalism, I am sorry to state, is still practised in Borneo. I have been permitted, by his Excellency Rajah Brooke, to make the following extract from the MS. of his private Journal:—

“The following is the testimony of three intelligent Dyaks from the interior, given in the most frank manner to be conceived—as direct and unimpeachable as evidence as I ever heard offered during several months together, and a part in conversation with numerous persons. I examined them myself, and entertain no doubt of the correctness of these statements, as far as their personal knowledge was concerned. The witnesses themselves stated, over and over again, with the

utmost clearness how much they *had seen*, and how much heard.

“ There was such perfect good faith and simplicity in their stories, as to carry conviction of their truth. The three men are named Kusu, Gajah, Rinong, and stated as follows :—

“ ‘ We are of the tribe of Sibara, which is likewise the name of a branch of the Kapnas river. The tribe of Sibara contains 2000 (and even more) fighting men (*tikaman*), and is under the government of Panguran Kuning, who resides at Sangtang, a Malay town on the Kapnas. We have none of us been up to the interior of the Kapnas, where the Kayans live, but they often come down to Sangtang, where we meet them.

“ ‘ The Kayans are quite independent, very numerous and powerful : they are governed by their own Rajahs, whom they call Takuan. Some of these Kayan tribes are cannibals (*makan manusia*), it is generally reported, but we know it to be true. Panguran Kuning, of Sangtang, was at war a few years ago with Panguran Mahomed of Suwite (*Suwright*), a Malay town situated on the Kapnas between Sangtang and Salimbow. A large force was collected to attack Suwite. These were Malays (*Lant*) of Sangtang, and Sakadow, and the Dyaks of Sibara, Samarnang, Dussan, and of other tribes, and besides all these there was a party of about fifty Kayans. We never heard the particular name of this Kayan tribe, for we did not mix with them, nor did we understand their language. Suwite was not taken, but a few detached horses were captured, and one man of the enemy was killed in the assault. Kusu saw these Kayans run small spits of iron, from eight inches to a foot long, into the fleshy parts of the legs and arms, from the elbow to the shoulder, and from above the ankle beneath the calf to the knee joint, and then they sliced off the flesh with their swords and put it into baskets.

“ ‘ They carry these spits, as we all saw, in a case under the scabbards of their swords. They prize heads in the same way as the Dyaks. They took all the flesh of the body, leaving only the big bones, and carried it to their boats, and we all saw them broil (*panggang*), and afterwards eat it. They ate it with great relish, and it smelt, whilst cooking, like

hogs' flesh. It was not we alone that saw them eat this, but the whole force (balla) saw it. Men say that many of these interior tribes of Kayans eat human flesh: most, however, they say, do not; and all of them are represented to be good people, and very hospitable; and we never heard that they eat any other than the flesh of their enemies. It made us sick to see them, and we were afraid (takut), or horrified.

“‘ This was not the only time we have seen men eat human flesh. The Dyaks of Jangkang are likewise cannibals: they live somewhere between Sangow and Sadung, on a branch of the Sangow river called Sakiam. The Jangkangs had been out attacking the Ungkias tribe, and, after the excursion, came to our village, with several baskets of human flesh, for they had killed two men. They cooked and ate this outside our house, but it had been broiled (panggang) before. I knew it to be human flesh, for I saw one of them turning a hand with the fingers of a dead man at the fire, and we saw them eat this hand on the bank of the river close to our house. We talked to them about it, and they did not make any secret of it.

“‘ The Jangkang people, according to report, eat Malays, or Dyaks, or any one else they kill in war; and they kill their own sick, if near unto death, and eat them. There was an instance of this at Sangtang. Whilst a party of this people were staying at Sangtang, one of them fell out of a mango tree (a horse mango), and broke his arm, besides being otherwise much hurt. His companions cut his throat (sambilili), and ate him up. We none of us, however, saw this happen, but we heard it from Sangtang people. It is likewise said, but we do not know it for a truth, that when they gave their yearly feast (makar taun), a man will borrow a plump child for eating from his neighbour, and repay in kind with a child of his own when wanted. We do not, however, know personally any thing beyond having seen them once eating human flesh, but we have heard these things, and believe them: they are well known.’ ”

6 REMARKS
ON THE
NATURE, OBJECTS, AND EVIDENCES OF
ETHNOLOGICAL SCIENCE,

AN ADDRESS READ AT A CONVERSAZIONE ON JUNE 4, 1851,

BY RICHARD CULL, Esq., Honorary Secretary.

MANY well-educated persons, and some of them scientific men, have vague notions of the objects of our inquiry, and of the means of our investigation.

When the Zoologist describes our study as the natural history of man, he only partially describes our pursuit. If a work were written on the natural history of man in the same way as a Zoologist writes the natural history of the elephant, for instance, he would leave the most important objects of our investigation untouched. The Zoologist describes the peculiarities of the elephant as he is found in Africa and in Asia, and ends there. The Ethnologist describes man as he is found in various localities, with all the peculiarities of physical structure and mental constitution ; but this is only the basis of a wide inquiry concerning man. The Ethnologist proceeds to investigate man in groups, as a people, a nation, and variety ; he proceeds to study the history of those peoples, nations, and varieties, tracing them as far back as history is able to conduct him ; he endeavours to discover the sources of those peoples, nations, and varieties ; he seeks out their affinities and connexions ; and struggles after that dim and shadowy knowledge of man as he existed before the dawn of history.

Ethnology, then, is not the mere natural history of man, in the same sense as we apply the term natural history in zoology.

When the Phrenologist describes our study as that of the physiology of the brain of the several varieties of man that exist on the earth, he, too, only partially describes our study. I will not undervalue the collection of specimens of national crania. I am fully alive to the importance of Phrenology, for its own sake as well as for its numerous applications. I know its value in ethnological research. But when the Phrenologist

describes ethnology as the phrenology of the several varieties of man, he only partially describes our science.

Mr. Deville made a collection of national crania; such a collection has been made by the Edinburgh Phrenological Society; and there is Dr. Morton's magnificent collection. These collections are probably sufficient to idealize into typical forms the crania of certain varieties of man, in the way that Mr. Cox has shewn the typical form of cranium of the Esquimaux, and also of that of the Cingalese. But such typical forms must be obtained of all the varieties now existing, before we are prepared to discuss, on such evidence, the connexion and affiliation of the varieties of man.

Ethnology, then, is something more than phrenology.

When the Philologist has studied the connections and relationships of several languages, and from those relationships infers certain affiliations of the peoples speaking those languages, he is apt to exclaim, and sometimes he does coolly declare to us, that philology is ethnology. This is, as you are prepared to decide, a great mistake. Ethnology is something more than philology. Philological evidence is of great value, but is only one line of evidence, and requires other evidence to corroborate it.

It has been declared by some that ethnology like zoology and botany is only a part of geography, adopting the term geography in an enlarged sense, to include the whole fauna. Such a declaration asserts that the several varieties of man are indigenous to their several localities, in the same sense as ferns and lichens, crocodiles and kangaroos, are indigenous to their localities. Such declarations assume as truths the very things that are to be investigated. If geography, in its enlarged sense, is to include a description of man as he is now found in the several regions, in the same way as it includes the fauna, it is evident that it will include only the zoological or natural history description of man, and not the ethnological description of man.

Geographical contiguity and ethnological connexion are very different things. All the Jews are ethnologically connected, although they may be natives of Great Britain, of America, or of China.

It has been stated that the Ethnologist, like the Naturalist, is unsatisfied with the study of man as he now exists, but that he studies man as he was, and, by the torch of history, brings to light the nations of antiquity, even those that have entirely disappeared, and gives a picture of the changes which their physical nature has undergone in the vicissitudes of time. And so the Naturalist, unsatisfied with the natural history of plants and animals as they now exist, seeks in the crust of the earth for those fossils of former plants and animals which lie embedded in its strata, and is thus enabled to restore whole genera and species which have long since become extinct; and by these remains is able to supply many links in his chain of beings which otherwise would be broken. This is all very interesting, but, unfortunately for the Naturalist who has rushed into our domain, it is not true. The Ethnologist does not study the past history of man for any such object as the Naturalist studies the fossils of the earth's crust. The Ethnologist studies the past history to trace descent and origin. But who ever heard of a Naturalist studying fossils to trace descent and origin? The Naturalist studies fossils in order to ascertain the physical condition of our planet at different bygone epochs. Thus the study of the fossils of Chelonian reptiles found in Great Britain throws a flood of light on the physical condition of this part of the globe at a period long anterior to historic times.

The Ethnologist, who studies the bones, and especially the crania, which are found in tumuli and ancient burying-places—those for instance in the North of Europe and Asia—has no idea of restoring lost genera or species of man, but is simply desirous of ascertaining the type of cranium of those ancient inhabitants of this country and of Scandinavia, before we were overrun by the Celts, and Scandinavia by the Lappes and Fins; and of determining, by similar evidence, if the race inhabiting Siberia and the whole of North Asia were of a similar type.

These few remarks are intended to point out the errors into which certain classes of educated men fall, in conceiving the nature and scope of our inquiries. I now proceed briefly to state the objects of our science, and the kinds of evidence, and thence of inquiry, on which, as a science, it rests.

The great object is man ; not, however, as an individual, but as a people or nation. The word 'Ethnology' is composed of two Greek roots, viz. *ἔθνος*, 'a people or nation,' and *λογία*, 'a discourse.'

From the circumpolar regions to the equator, in every latitude from the snow-built dwellings of the Esquimaux to the sandy desert of the torrid zone, do we find man. We find him existing under widely-different circumstances, presenting great physical differences, yet always characterized by those physical and mental characters which distinguish him from the brute creation, and loudly proclaim him to be of far higher rank in the animal kingdom.

When the navigators in the fifteenth and sixteenth centuries discovered America and the West Indies, they found human inhabitants in those countries ; and when at a later period the numerous islands in the Pacific were discovered, every group was found to be inhabited by man. This great fact naturally suggests the question, How came those hitherto unknown countries and islands to be inhabited ? Were there separate creations for those localities ? Or did they migrate from other countries ? Are the peculiar physical characters which are found in different races of men the result of the climate and other physical causes merely modifying an original type ; or are those physical characters inherent, special, and unchangeable by external physical causes ? In other words, is the black complexion of the Negro, his woolly hair, his protruding jaw, which appears to be more nearly allied to the muzzle of an ape than to the human form of a European—are these the result of the physical causes which are in operation on the Western Coast of Africa ? And are the light brown complexion, beautifully glossy black hair and regular features of the Berbers, Moroquins, Tuaricks, Tunisians, and others on the northern coast of Africa, the result of physical causes in operation on that coast ? If these causes, whatever they are, effect such different results, do they merely modify one set of previous characteristics, or do they originate those physical characters ? Such questions lead us to ask if it be possible that the Negro, the Chinese, the North-American Indian, the Hindoo, and the European, are descended from one pair

originally. Can we admit the unity of the human race? or shall we dream of the creation of several Adams?

Questions concerning the origin and cause of things claim our attention, and awaken inquiry with an interest peculiarly their own; and the discovery of one source and one cause yields a corresponding pleasure. "*Felix qui potuit rerum cognoscere causas.*" But questions concerning the origin of nations, the causes of peculiarities of the physical structure of man, the causes of his intellectual and moral peculiarities, the causes of his lingual peculiarities, and of every other specialty that distinguishes one tribe and people from another, are of that absorbing interest to which all other departments of natural knowledge seem to be greatly inferior, if not of only slight importance.

But in our anxiety to know the origin of the several nations that people the earth we must constantly be on our guard against forming a rash judgment. We ought to know the bias of our own minds to guard against its undue influence in the formation of our opinions. We must not rest satisfied with one-sided evidence, but must carefully obtain evidence from every source; and, after impartially examining its value and character in relation to the question at issue, we must conscientiously give our decision.

I urge this, because I have heard some men, on the one hand, say, that all that can be known of the peopling of the earth, of the origin of nations, and of the causes of the diversity of physical characteristics in man, is plainly stated in the early books of the Bible; that is, in the books of Moses. I hear others, on the other hand, confidently assert that the Holy Scriptures can be no guide, nor even evidence at all, on the subject.

Such discordant opinions would not be entertained, much less expressed with dogmatic confidence, if clear ideas of the objects of Ethnological science had previously been formed. Our science attempts to solve two series of questions. One concerning

1. THE PRESENT TIME; and the other,
2. THE PAST TIME. Thus,

What are the physical and mental conditions of man in all

countries of the earth as *now* presented to us? And what were the physical and mental conditions of man in all countries of the earth as he *formerly* existed?

To answer the first question, or rather group of questions, we travel to the various nations of the earth, and observe man under the different influences of climate, of food, of local situation, of clothing, of nutrition. We observe him in his domestic habits, his occupations, his wars, his sports, his pleasures, his moral bearing to himself and his fellows, and his religious bearing to his Creator and to those real or imaginary beings whom he worships, whether from love or fear. We observe his customs and his language. Thus we study his form, and both the material and intellectual products of his mind; and in short, we study him in space, or as he exists in the present time.

This knowledge prepares our minds to receive a knowledge of man as he exists in time—in the past, and that not merely in the historical epoch, but beyond it. The annals of most nations carry us but a little way back; but even so far back as authentic history carries us, the evidence is historical, and mainly depends on records. The acumen and honesty of the historian are requisite for this part of our investigation;—acumen, to perceive what bears on the subject; and honesty, to rightly estimate its value.

But to ascend higher up the stream of time than our records will carry us demands other kind of evidence, viz. antiquarian evidence. This palæontological part of ethnology is of high interest and of great value. It often happens that this evidence is stronger, and even more direct, than the historical evidence for a later period. This you will observe is just as it is in geology, where the discovery of fossils in strata is evidence sometimes of far greater value than any historical documents can be as to the existence and character of certain changes which have taken place in the earth's crust. The examination of man as he now exists belongs to science; the examination of man as he formerly existed during the historical period, by means of studying those historical and other documents relating to him, belongs chiefly to literature; and the examination of man as he existed in the pre-historic period is a species

of antiquarian and palæontographical research, demanding a combination both of science and literature.

These considerations convince us, that those who assert, on the one hand, that the Bible teaches all that can be known of ethnology, and the origin of nations, are in error; for although it contains most valuable information relating to Palestine and the adjacent region, it contains none whatever concerning America, Australia, New Zealand, the Islands of the Pacific, and many other large areas of the earth's surface. And those who assert, on the other hand, the uselessness of the Bible in our inquiries, are also in error; for where else shall we find so ancient a history? It is true that the early history is chiefly that of Abraham and his posterity; but we must remember that the Holy Scriptures are not written to teach us ethnology, but religion, and it is only from its incidental statements that we gather from it some ethnology. Thus, we do not even know what complexion Abraham was, or Moses, much less Noah or Adam.

Ethnology, like other sciences, consists of facts and reasonings. The principles of the science must bind together the facts, or they are valueless; and we must necessarily have most confidence in those great principles which are established by the concurrent testimony of distinct lines of evidence. Thus, if the anatomical and physiological evidence is supported by the philological, and this again is concurrent with the historical, we cannot escape the conviction of the truth of our principles. But if the physiological should not only not coincide, but run counter to the philological, we should require a much larger amount of evidence, and that, too, of a more decided character, to induce us to yield to the philological side.

I will briefly illustrate these two positions.

The anatomical characters of the Hindoos strikingly distinguish them from the non-Hindoos, *i.e.* from the Bhils, Ghonds, and other mountain tribes of India.

The customs, religion, habits, and mode of thought, also distinguish them.

The language or philology also distinguishes them.

Their history and tradition also distinguish them.

Here you see they are distinguished by distinct lines of concurrent evidence.

We, however, go further. Not only does the testimony stamp them as different, but it stamps these various tribes of non-Hindoos as one distinct people.

Now, with all this evidence, we cannot escape the conclusion of the distinction in these peoples.

Such a conclusion is again the starting-point of other inquiries; but enough is said for my object.

Now, let us take the Indo-Germanic group of languages. The philological line of evidence points out an affinity which is unsupported by the physiological, and also by the historical lines of evidence.

The philological line of evidence connects the Hindoos, Germans, Italians, Celts, and some others, together; but the physical characters of the Hindoos, Germans, Italians, and Celts are very different; and there is neither history nor tradition in support nor against that connection. In such a case the philological and physiological lines of evidence are antagonistic, while history is silent, and therefore indifferent. The philological line of evidence is positive, the physiological negative, and the historical indifferent to the conclusion.

With regard to the people that inhabited this country before the Celts: they lived in pre-historic times. We therefore not only have no philological evidence, but no historical, and are entirely dependent on archæological evidence. We have only bones, crania, and some implements belonging to this ancient people, which are brought to light by opening tumuli of the primæval or stone period of barrows. When we possess only one line of evidence it behoves us to be very careful in sifting that evidence before we base any general views on it.

There are conclusions, however, of an ethnological character, that are perfectly valid, which rest only on such evidence.

There are some conclusions, too, which are based exclusively on philological evidence, of so sound a character as not to be shaken. Thus the linguistic researches of Colonel Rawlinson have decided some questions as to the ethnography of the Assyrian Empire.

The cuniform inscriptions, like the celebrated one at Behistun, are, in almost every instance, trilingual and trilateral.

They are cut in three languages, and each language has its own peculiar alphabet. The inscriptions record the glories of the house of Archæmenes. They are trilingual, in order to enable the people subject to the Assyrian sway to read and know the records; just as, at the present day, a Governor of Baghdad would have an edict published in three languages—the Persian, the Turkish, and Arabic, in order for it to be generally understood. And it is very remarkable, that, in the time of Cyrus and Darius, the Assyrian empire was ethnographically constituted as the region is at present. The population then had to be addressed in those three languages from which the modern Persian, Turkish, and Arabic are derived, and which at that period represented those languages.

It will be observed that we have no lines of historical or physiological evidence to sanction our philological, but yet we have every confidence in our conclusions.

I have said enough in these few remarks to shew the broad basis on which ethnology is built; the many and varied researches which are required for its advancement; and the large amount of exact knowledge which is required in order to cultivate our science. As the solid foundations of geology could not be laid until some other sciences were well advanced, so the solid foundations of ethnology required an advanced state at least of anatomy, physiology, philology, and archæology.

OBITUARY NOTICE
OF THE LATE
VICE-ADMIRAL SIR CHARLES MALCOLM,
PRESIDENT OF THE ETHNOLOGICAL SOCIETY.

Read 12th November 1851.

THE Ethnological Society had the misfortune to lose its esteemed President just as the last Session closed. Vice-Admiral Sir Charles Malcolm died at Brighton on the 14th of June last, from an attack of paralysis. It was the second attack, and he gradually sank, surviving the shock only four days. There was a period of nearly ten years between the two attacks. He was certainly declining in health and strength for four months before his last illness.

Sir Charles was the youngest son of a Dumfries family, several members of which highly distinguished themselves as warriors, viz. his brother, Admiral Sir Pulteney Malcolm, G.C.B., who died in 1838; another brother, General Sir John Malcolm, G.C.B., the historian of India, and late envoy to Persia, who died in 1833; and another brother, Sir James Malcolm, K.C.B., Colonel of Marines at the storming of Fort Oswego on Lake Ontario, who died in 1850; and he himself, making four brothers, each of whom was eminent in his own profession.

I am not about to enter upon the details of their glorious career: that you will find written by history in the archives of their country. I shall not even describe the heroic deeds of our late President and loved friend: they are emblazoned on the rolls of fame. My object, in this place, is to speak of him more in connection with the advancement of science, than with the "pomp and circumstance of war."

Sir Charles Malcolm was the tenth child, and youngest son, of George Malcolm, of Burnfoot, Dumfriesshire, Esq., and Margaret Pasley his wife, and she was sister to Admiral Sir

Thomas Pasley, Bart. Sir Charles was born on the 5th of September 1782. In 1795, at thirteen years of age, he embarked as midshipman on board the "Fox," of 32 guns, under the command of his brother Pulteney. In 1802, at the age of twenty, he was promoted to the rank of Post-captain. In 1837 he became a Rear-admiral, and in 1847 a Vice-admiral. His naval services you will find detailed in Byrne's "Naval Biography." He possessed great courage; for when in command of the "Narcissus," he made, on the 30th of October 1807, a desperate attack with four boats on a convoy of thirty sail, near Brest, which was at anchor under cover of several heavy batteries. In order to determine on and make such an attack, our late friend, as regards bravery, must have been composed of the same metal as Howe, and Sidney Smith, and Nelson.

In 1828 Sir Charles Malcolm was appointed to superintend the *Bombay marine*, to which he gave the more appropriate name of *Indian navy*. It was here that he used the influence of his high position to give a scientific direction to the pursuits of the officers of the Indian navy, and encouraged in many ways all those whom he found engaged in advancing geographical and other knowledge. This, you will observe, exhibits in an especial manner the natural character of his mind; for when he entered the naval service the education of the young officer was limited to what is required to navigate his ship, and to work her when alongside an enemy. In the ten years which he held this command, he ordered important and extensive surveys to be made, which were not limited to India, but extended to the north-eastern regions of Africa, as he greatly desired to open the Somali coast to British commercial enterprise. He founded the Bombay Geographical Society, to which he communicated several papers, and exerted himself to promote its success. And when Captain John Betham, of the Indian navy, published his method of obtaining the latitude by observations on the pole-star, he dedicated his work to Sir Charles Malcolm, as a tribute of respect to one who had much promoted science.

Sir Charles Malcolm possessed extensive and accurate knowledge in several departments of science. He manifested

a great desire to gain knowledge, and was most free in communicating what he knew to others. He was an entire stranger to the mean fear of seeing himself surpassed in the acquisition of knowledge. Considering his career of active life from so early an age, we scarcely expect to find him a scientific man in the high sense of that term. He had not the opportunity of distinguishing himself by any lengthened scientific investigation, such as would obtain for him that high position; but he well knew the direction in which inquiry was needed, and was ever ready to point out the means, and aid those who had opportunity for such investigations.

Sir Charles Malcolm returned to England in 1838, and devoted much time to Societies for the advancement of science. He was a Fellow of the Royal Geographical Society, of which he was on the Council. He was a Fellow also of the Royal Asiatic Society, and was also on its Council. Sir Charles Malcolm was one of the earliest Fellows of our Society, and was long its invaluable President. He took a deep interest in Ethnology, and much contributed to the success and prosperity of our Society. He was ever foremost in personal exertion to advance our interest. He did not wait until we were prosperous before he gave us his countenance, but at once joined us, worked with us, and was willing to take any position to advance us. His annual addresses are evidences of his knowledge of Ethnology; and yet his modesty was so great, that, in his own words, he accepted the office of President only "until some one properly qualified could be obtained."

The sterling qualities of Sir Charles Malcolm endeared him to the Fellows of the Society. The Council, however, from greater contact with him, can better appreciate those qualities, and therefore more fully feel the great loss which the Society has sustained. And the Honorary Secretary, with almost daily intercourse, may perhaps be permitted to add, that the deep impression made on him by the kindness and frankness of the lamented Sir Charles Malcolm can never be effaced from his memory.

ETHNOLOGICAL RESEARCHES IN SANTO DOMINGO.

By **SIR ROBERT SCHOMBURGK.**

In a Letter addressed to H. R. H. PRINCE ALBERT, K.G., and communicated by his Royal Highness to the Ethnological Society.—Read 11th December 1851.

SIR,

SANTO DOMINGO, as the cradle of the new world, will always possess great interest, although its splendour belongs to former days; and the city, once the capital of the Spanish empire in South America, of which Oviedo, the historian, wrote to the Emperor Charles V. that Spain possessed none that could surpass it, shews in our days its former magnificence only in crumbling ruins. My eight years' wanderings in the interior of Guiana, among the Indian tribes that inhabit those wild regions, have made me so well acquainted with their manners and languages, that I gladly avail myself of every opportunity, to trace, by a comparison of customs and idioms, the relationship between the still existing tribes, and those which European cruelty has extirpated. My appointment as Her Majesty's Consul to the Dominican Republic promised me, during leisure hours, a rich field for such investigations, for the Europeans came here first in close contact with the aborigines.

It is a melancholy fact, that of the millions of natives who, at the discovery, peopled the island of St. Domingo, not a single pure descendant does now exist. But a careful observer of the mixed races, that in a great measure form the population of the Dominican Republic, will occasionally trace among them the characteristic features of the aborigines.

Some stocks of the human race retain their characteristics much more tenaciously than others, the peculiarities of one

being lost in a few generations, and those of another being transmitted through several. I have never seen that tenacity more displayed than among the mixed race, who to this day are called "Indios" in Santo Domingo, and in whom the peculiarities of the pure Indian have preserved themselves for more than two centuries.

This observation refers chiefly to the female sex of the so-called "Indios." Their symmetrical forms, the pure olive complexion and soft skin, their large black eyes, and the most luxuriant hair of an ebony colour, attest at once their descent from the Indian stock. We are told by the historians that the last remnant of the Indians, amounting to from three to four hundred, retired under Enrique, the last of the Caciques of Santo Domingo, to Boya, a village about thirty miles to the north-north-east of the city. Enrique had been converted to the Christian religion, and the Emperor Charles V. ensured to this remnant of the aborigines civil rights, and conferred upon him the title of Don. This miserable fragment of a once powerful nation soon vanished from the earth, borne down by their misfortunes and the diseases introduced by the Spaniards. The extirpation of the pure Indian race prevented me from making comparative inquiries between the still existing tribes of Guiana and those that once inhabited Santo Domingo. My researches were therefore restricted to what history, and the few and poor monuments have transmitted to us of their customs and manners. Their language lives only in the names of places, rivers, trees, and fruits; but all combine in declaring that the people who bestowed these names were identical with the Carib and Arawak tribes of Guiana.

An excursion to the calcareous caverns of Pommier, about ten leagues to the west of the city of Santo Domingo, afforded me the examination of some picture-writing executed by the Indians after the arrival of the Spaniards. These remarkable caves, which are in themselves of high interest, are situated within the district over which, at the landing of the Spaniards, the fair Indian Catalina reigned as Cacique. Oviedo relates that she knew how to captivate the Aragonian, Miguel Diaz. In consequence of a brawl with one of his

companions, whom he supposed he had mortally wounded, Diaz fled from Isabella, and found an asylum at Catalina's village. Fearful of losing her lover, who, after a few months, seemed to long to return to his companions and his accustomed occupations, Catalina employed the most powerful means she could have resorted to, in order to induce the Spaniards to settle within her own territory, concluding naturally that this would ensure the continued presence of Diaz. She related, therefore, that the adjacent mountains possessed rich mines, and drew his attention to the superior fertility of the soil, which so much surpassed that upon which Columbus had founded the city of Isabella; moreover, that the river Ozama afforded at its entrance a secure and fine harbour. Diaz returned with this information to Isabella, where he found to his joy the man recovered from his wounds whom he thought he had killed, and the report of the rich mines produced him an easy pardon. The Adelantado Bartholomew, who governed in the absence of his brother, visited the district himself, and erected, in 1496, a fortified tower in the neighbourhood of the mines, which he called San Cristobal; but the workmen that built it, finding the precious metal even in the stones they used for its construction, named it the "Golden Tower." The mines were soon exhausted, and the country assumed again the aspect of exuberant nature. When, therefore, the covetousness and cupidity of the Spaniards sacrificed the lives of millions of Indians to their idol gold, the caverns, which previously had only been used for their worship, became now a retreat from the Spanish crossbows and the frightful bloodhounds sent in pursuit of the poor Indian.

Numerous traditions prevail among the present inhabitants of the neighbourhood; and the most daring of the hunters in pursuit of wild hogs would never venture to follow the chased animal when it sought its retreat in one of the caves which no person has entered yet; for here, they say, Catalina reigns still as Cacique over her subjects, who only leave their subterranean abode when darkness has spread over the adjacent country. When the people that related the legend to me observed a doubtful smile in my features, they adduced as

a proof in support of it, that every time they visited the outer caves, and left perchance some rubbish or the ashes of fires on the ground, the Indians appeared during night, and swept it carefully away, so that the ground would be found next morning perfectly clean.

I was greatly interested in a number of symbolic pictures, which the Indians had traced with charcoal on the white and smooth walls of one of the smaller caves, which bears at present the name of the "painted chamber." This embankment exhibits numerous figures, rudely drawn on the white walls, and of such a fresh appearance that one is inclined to think it had been done but yesterday. Peter Martyr, of Angleria, the contemporary of Columbus, and one of the earliest historians of his discoveries, relates, in his first "Decade of the Ocean," that the Aborigines of Santo Domingo held caves in great veneration; for out of them, they say, came the sun and moon to give light to the world; and mankind likewise issued from two caves of unequal height, according to the size of their statures. The "painted chamber" was probably used for worship. The figures, of a few of which I have taken the liberty to enclose a representation, consist of birds, men, utensils employed in the household of the Indians, and ships of European appearance.

During my journeys in the interior of Guiana, I found at the "Ilha de Pedra," on the Rio Negro (a tributary of the Amazon), the representation of two vessels under sail, carved in the granitic rock. The smaller represented a schooner, the larger a galleon. In the general uncertainty which prevails with regard to these monuments of by-gone races, it was particularly gratifying to me to find these sculptures, which afforded a clue to the period when they were executed. The caves near Pommier offered a second instance of a still later period, where the art of cutting figures into the rock was no longer practised; namely, a large bird among the picture-writings is represented with a ship on its back, a symbol, perhaps, of deep signification. The cross occurs repeatedly, alone or combined with other figures; but this is not surprising, as the Spaniards, at the earliest period of their arrival, made converts from among the Indians.

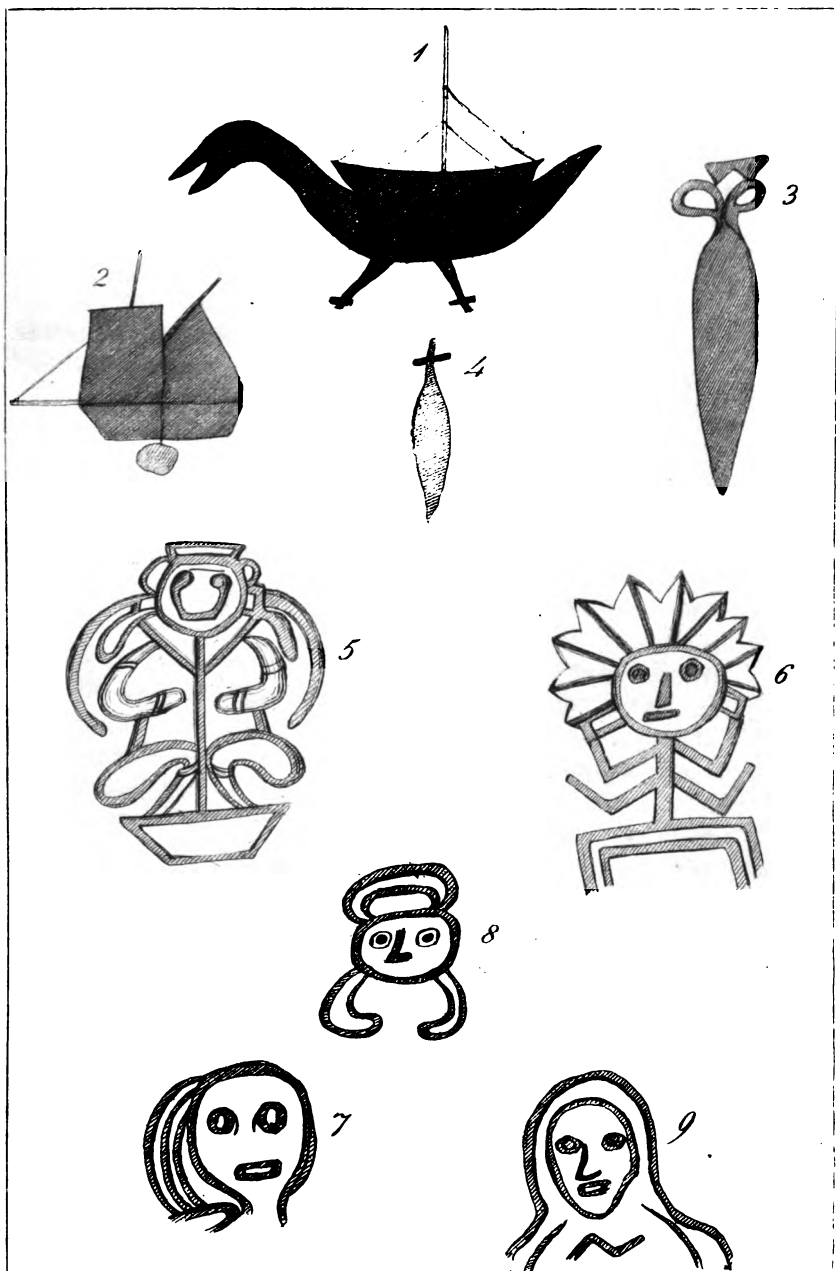


Fig. 1,2,3,4 Painted with Charcoal on the Cave walls at Pommier.
Fig. 5,6,7,8,9 Cut in the Rock at the Caves of Pommier.

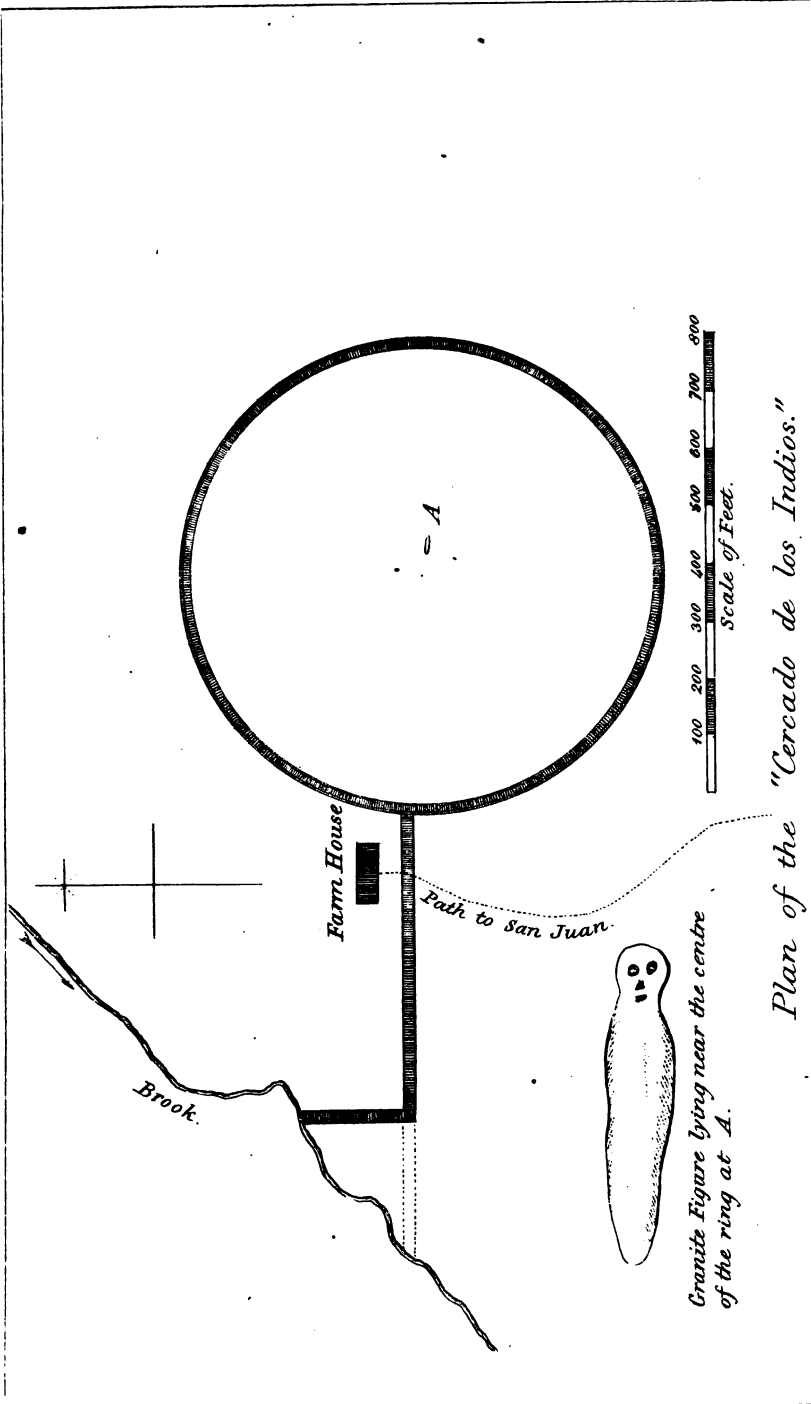
Near the entrance of a second cave, close to the former, I observed some carvings in the rock. The character of these figures, and their being cut in the hard substance of stone, indicate a more remote date than those in the other cave. I have copied some of these figures, among which No. 5 resembles some of the idols which to this day are occasionally found in the districts over which, at the landing of Columbus, Mayobanex and Guarionex, both of the Carib nation, reigned as Caciques. The head-dress of Figure 6 occurs frequently on the carved rocks in Guiana, which I traced during my travels between the rivers Orinoco and Amazon, over a territory 192,000 square miles in compass. The rock at the cavern near Pommier contained numerous other figures besides those which I copied, but time did not permit me to trace any more during that visit, and circumstances have since prevented me from returning to the caves.

Baron Humboldt observes, when alluding to the carvings he met with on the banks of the Orinoco, that "it must not be forgotten that nations of very different descent, when in a similar uncivilized state, having the same disposition to simplify and generalize outlines, and being impelled by inherent mental dispositions to form rhythmical repetitions and series, may be led to produce similar signs and symbols." Baron Humboldt had only opportunity to view the carved figures on the banks of the Orinoco, but the examination of a great number of these symbols shews to me that there is a great difference in their character and execution; nor is it my opinion that the idols worked in stone, and the carvings on the rocks, were executed by the races that inhabited South America and the West Indies at the time of their discovery. They belong to a remoter period, and exhibit much more skill and patience than the simple figures painted with charcoal on the walls of the cave near Pommier. The figures carved in stone, and worked without iron tools, denote, if not civilization, a quick conception, and an inexhaustible patience, to give to these hard substances the desired forms. As a proof of this remark, I beg leave to draw the attention of your Royal Highness to the small sculptured figures which accompany this letter, and which I shall consider myself highly honoured if your Royal Highness will condescend to accept.

The terra cotta consists of rude ornaments, with which these races embellished their household utensils.

Judging by these specimens of their skill and imagination, only a low estimate can be formed of the civilization the people that made them had attained ; but where the design is solely to give expression to features the effort is not contemptible. I humbly beg leave to draw the attention of your Royal Highness to the figure marked No. 5, chiefly if seen from the left in profile.

With respect to the age or epoch when the figures sculptured of stone were executed there is no tradition. It is remarkable that they are only found where we have sure evidence that the Caribs inhabited or visited the place. I have no reason to believe that they were made by the Caribs, which opinion I am the more inclined to adopt on comparing them with the tools and utensils executed by the still existing tribes I found in Guiana. There are, however, various proofs that the Caribs inhabited Santo Domingo ; among others, I found at the eastern point of the island, called Punta Engaño, numerous heaps of conchshells (*strombus gigas*). These shells have invariably a hole near the spire, which has been made for the purpose of detaching the animal from the shell, and to extract it with ease. I met with a large number of similar piles at the island of Anegada, which the historians of the Antilles ascribe to the Caribs, who, on their descent from the Lucayas to wage war upon the natives of Puerto Rico, touched first at Anegada, in order to provision themselves with conches for their expedition. A far more interesting discovery than these heaps of conchshells, during my travels in Santo Domingo, is, however, a granitic ring in the neighbourhood of San Juan de Maguana, which seems to have entirely escaped the attention of previous historians and travellers. Maguana formed one of the five kingdoms into which Santo Domingo, on the arrival of the Spaniards, was divided. It was governed by the Carib Cacique Caonabo (which name signifies rain), the most fierce and powerful of the chieftains, and the irreconcilable enemy of the Europeans. His favourite wife was the unfortunate Anacaona, famed in the island for her beauty, her wisdom, and, as recorded by all the early historians, for her kindness towards the white men.



Nevertheless, Ovando, when Governor of Santo Domingo, accused her of conspiracy, and carried her in chains to the city, and "ignominiously hanged her in the presence of the people whom she had so long and so signally befriended." The granitic ring is now known in the neighbourhood under the name of "el Cercado de los Indios," and lies on a savannah surrounded with groves of wood, and bounded by the river Maguana. The circle consists mostly of granitic rocks, which prove, by their smoothness, that they have been collected on the banks of a river, probably at the Maguana, although its distance is considerable. The rocks are mostly each from thirty to fifty pounds in weight, and have been placed closely together, giving the ring the appearance of a paved road, twenty-one feet in breadth, and, as far as the trees and bushes which had grown up from between the rocks permitted me to ascertain, two thousand two hundred and seventy feet in circumference. A large granitic rock, five feet seven inches in length, ending in obtuse points, lies nearly in the middle of the circle, partly imbedded in the ground. I do not think that its present situation is the one it originally occupied; the rock stood probably in the centre. It has been smoothed and fashioned by human hands; and although the surface has suffered from the atmospheric influence, there is evidence that it was intended to represent a human figure: the cavities of the eyes and mouth are still visible. This rock has, in every respect, the appearance of the figure represented by Père Charlevoix in his "*Histoire de l'île Espanole ou de Saint-Domingue*," which he designates as a "*figure trouvée dans une sepulture Indienne*." A pathway of the same breadth as the ring extends from it firstly due west, and turns afterwards at right angle to the north, ending at a small brook. The pathway is, almost for its whole extent, overgrown with thick forest; I could not, therefore, ascertain the exact length, and the accompanying plan exhibits this part only on supposition. No doubt can exist that this circle surrounded the Indian idol, and that within it thousands of the natives adored the deity in the unshapen form of the granitic rock. But another question remains to be solved, namely, were the inhabitants whom the Spaniards met in the island the constructors of this ring?

Were they the adorers of that deity? I think not. All the early historians of the discovery of the new world concur that the natives of the Antilles and the adjacent terra firma possessed no ceremonies in adorning the deity. Peter Martyr, speaking of the superstitions of the Indians who inhabited Hispaniola, or Santo Domingo, does not allude to any public worship, and expressly observes that their idols or zemes were not of stone, but merely images made in the shape of devils from gossampine cotton.

Among the antiquities recently discovered near San Diego, within a day's march of the Pacific Ocean, at the head of the Gulf of California, were likewise granitic rings, or circular walls round venerable trees, columns, and blocks of hieroglyphics. If my opinion could possess any value, I should pronounce the granitic ring near San Juan, the figures which I have seen cut into rocks in the interior of Guiana, and the sculptured figures, to belong to a race far superior in intellect to the one Columbus met in Hispaniola, who came from the northern parts of Mexico adjacent to the ancient country or district of Huastecas, and that this race was conquered and extirpated by the nations that inhabited the countries when the Europeans landed.

I venture to hope that the account of my discoveries of a few monuments that have descended to us of a by-gone race may not be entirely unacceptable.

I intend to commence, in a few days, my journey to the northern provinces, for the execution of which I have already received the permission of Lord Palmerston, and promise myself a rich harvest among the ruins of the first settlements and fortifications which the Europeans erected in the New World.

I remain,

With the highest respect,

SIR,

Your Royal Highness'

most dutiful and most devoted humble servant,

ROBERT H. SCHOMBURGK.

City of Santo Domingo,
15th March 1851.

O

OBSERVATIONS

ON THE

STATURE, BODILY WEIGHT, MAGNITUDE OF CHEST, AND PHYSICAL STRENGTH

OF THE

NEW ZEALAND RACE OF MEN.

By A. S. THOMSON, M.D., Surgeon 58th Regiment.

READ 14TH APRIL 1852.

"THE stature of the men of New Zealand," observes Captain Cook, "in general is equal to the largest of those in Europe: they are stout, well limbed, and fleshy." Almost every succeeding writer since then has described the New Zealanders as a tall, strong, and well-proportioned race. But as such statements convey to the mind no definite information, and furnish no data by which a comparison can be made with other races of men, I have thought some interesting, if not useful information, might be derived from a statistical inquiry into the above subjects.

First, On the Stature.

During the month of April 1849 many natives of New Zealand presented themselves at the Military Hospital for vaccination, and on that occasion I took down, indiscriminately, the height of 147 men, and the results were as follows:—

	ft.	in.		ft.	in.		ft.	in.		ft.	in.	
6 men were	5	0 to 5	1 in height.	18 men were	5	8 to 5	9	in height.				
1 ..	5	2 .. 5	3 ..	17 ..	5	9 .. 5	10 ..					
2 ..	5	3 .. 5	4 ..	13 ..	5	10 .. 5	11 ..					
9 ..	5	4 .. 5	5 ..	2 ..	5	11 .. 6	0 ..					
20 ..	5	5 .. 5	6 ..	1 ..	6	0 .. 6	1 ..					
37 ..	5	6 .. 5	7 ..	1 ..	6	5½ ..						
20 ..	5	7 .. 5	8 ..									

The mean height of these 147 New Zealanders was 5 feet 6 inches and nearly three-quarters of an inch.

For the sake of comparison, I examined 617 men of the 58th regiment, and found their average height was 5 feet 7½ inches; but as soldiers are a selected body, and many men are rejected in consequence of low stature, it is obvious this is not a fair comparison. I have, therefore, to obviate this objection, drawn up the following statement.

Table, shewing out of 100 New Zealanders and 100 natives of Great Britain and Ireland, the proportion of men among each race above 5 feet 6 inches in height.*

STATURE.				Out of 100 New Zealanders there were	Out of 100 Natives of Great Britain there were
From	ft. in.	to	ft. in.		
..	5 6	..	5 7	35	25
..	5 7	..	5 8	18	24
..	5 8	..	5 9	17	22
..	5 9	..	5 10	15	14
..	5 10	..	5 11	12	9
..	5 11	and upwards.		3	6
Total				100	100

It will be seen from the above there is no very great difference in the stature of the two races.

The Table is thus read:—Out of 100 natives of New Zealand, 35 are from 5 feet 6 inches to 5 feet 7 inches in height; whereas, among the natives of Great Britain, there are only 24 between this standard, &c.

It will be seen that the number of men from 5 feet 9 to 5 feet 10 inches among each race is similar, but among the

* The natives of Great Britain and Ireland, from which the data of this Table is drawn, were soldiers of the 58th regiment. Among the men observed, the grenadiers and eight companies were included (generally the largest men in the regiment), and out of 617 men there were—

27 men 5 feet 5 inches				to	5 feet 6 inches in height.			
149	..	5 ..	6 ..	to	5 ..	7	..	..
140	..	5 ..	7 ..	to	5 ..	8	..	..
129	..	5 ..	8 ..	to	5 ..	9	..	..
84	..	5 ..	9 ..	to	5 ..	10	..	..
54	..	5 ..	10 ..	to	5 ..	11	..	..
34	..	5 ..	11 ..	to	6 ..	3	..	..

English there are twice as many men 5 feet 11 and upwards, as there are among the New Zealanders.

It is not, however, in my power, in this country, to make a fair comparison on this question, but I have furnished materials which will enable others to do so. I may, however, observe, that Haller reckons the mean height of the men in the temperate countries of Europe to be 5 feet 5 and 5 feet 6 inches

The New Zealanders, like the English, do not reach their full stature until they are upwards of 20 years of age; for the mean height of 46 men from 16 to 20 was 5 feet 6 inches, whereas from 21 to 25 it was 5 feet 6 $\frac{3}{4}$ inches.

The natives of New Zealand have no idea of years with reference to their age; so that when I speak of their age it is to be clearly understood that it is an age given to them by myself from their general appearance.

On the Bodily Weight.

A man may have a certain stature, but unless he has weight of body he will not be able to undergo much labour. With the view of ascertaining the bodily weight of the New Zealanders, I carefully weighed, in a common lever balance, 150 men, and found—

8 men were 8 stone in weight, but under 9 stone.

25	..	9	..	..	10	.
54	..	10	..	..	11	..
41	..	11	..	..	12	..
19	..	12	..	..	13	..
3	..	13	..	..	14	..

The average weight of these 150 New Zealanders, deducting their mats and clothes, was 10 stone 1 lb. avoirdupois.*

With the same balance and weights I examined 617 men

* The New Zealanders, from whom these observations were drawn, were generally either Wakaito natives, or men employed upon public works. Both classes are generally better fed than the natives generally of New Zealand—the Waikato, from their trade in pigs, and the men on the works from the pay they receive for their labour.

of the 58th regiment, and found their average weight was 10 stone 3 lb.

It therefore appears, that so far as weight of body is concerned, there is little or no difference between the two races.

To render this difference more obvious, and to point out what weight is most common, I have drawn up the following statement.

Table, shewing out of 100 natives of New Zealand and 100 natives of Great Britain, the proportion of men found of different weights.*

WEIGHTS.	Out of 100 New Zealanders there were	Out of 100 Natives of Great Britain there were
8 stone but under 9 stone	5	2
9 .. 10 ..	17	19
10 .. 11 ..	36	36
11 .. 12 ..	27	33
12 .. 13 ..	13	8
13 .. and upwards.	2	2
	100	100

This Table shews how remarkably similar the two races are in weight.

With the view of shewing what influence age has on weight, I have drawn up the following statement.

* Out of 622 soldiers of the 58th regiment—

2 men were 7 stone, but under 8 stone.				
15	..	8	..	9 ..
115	..	9	..	10 ..
224	..	10	..	11 ..
206	..	11	..	12 ..
46	..	12	..	13 ..
7	..	13	..	14 ..
1	..	14	..	15 ..
6	..	15		

Table, shewing the average weight of New Zealanders and natives of Great Britain at different periods of life.

AGES.	New Zealanders.		English, Scotch, and Irish.	
	Number observed.	Average Weight.	Number observed	Average Weight.
		st. lb.		st. lb.
From 16 to 20 years inclusive	46	9 7	47	9 11
.. 21 to 25 ..	40	10 5	274	10 4
.. 26 to 30 ..	47	10 5½	213	10 4½
.. 30 and upwards	11	10 10	83	10 2
	144	10 1	617	10 3

Under 21 years of age the New Zealanders are less developed than the soldiers; but after 21 years of age the bodily weight of the New Zealanders is always a little above the soldiers of the 58th regiment.

I may here observe, that the falling away in bodily weight which the foregoing table shews, after 30 years of age, is, I am induced to think, peculiar to soldiers, for it has been remarked, there is something in the life of a private soldier more deteriorating to the constitution than the life of a day labourer.

Among Europeans in civil life the weight of the body, like that of the New Zealanders, will probably be found to increase up to 45 years of age.

The New Zealanders, as all men in a savage state, are indolent and lazy, working only when there is an absolute necessity for so doing. A few days' labour will enable them to plant sufficient food to sustain them for a year, and a great portion of their time afterwards is often spent in a dreamy state of idleness: a life which tends to develop the accumulation of fat, and to increase the weight of the body. As the New Zealanders advance in life the amount of labour they perform generally diminishes.

Among many races of men there is some particular part of the body where a great development of muscle or fat is found, which peculiarity adds to the size and weight of the body. This development is found in the lower extremities of the New Zealanders, for with few exceptions their thighs and legs are much larger than those of Europeans.

On the magnitude of the Chest.

There is a popular opinion that people who have large chests are able to undergo much labour and endure great fatigue. I have therefore examined the mean girth of the chest* of 151 New Zealanders, and found the following results :—

1 man's chest measured 29 inches and under 30 inches.			
2	....	30	.... 31 ..
3	....	31	.... 32 ..
14	....	32	.... 33 ..
9	....	33	.... 34 ..
25	....	34	.... 35 ..
33	....	35	.... 36 ..
28	....	36	.... 37 ..
23	....	37	.... 38 ..
9	....	38	.... 39 ..
3	....	39	.... 40 ..
1	....	40½	

The mean circumference of the chest of these 151 New Zealanders was 35·36 inches.

To prevent any mistake, with the same measure that I took the magnitude of the New Zealanders' chests, I carefully examined 628 men of the 58th regiment,† and found their mean girth of chest was 35·71 inches.

* The examination is made by passing a measuring tape round the chest on a level with the mammillæ, the arms being raised above the head so as to remove as much of the muscular substance as possible: during the time of measurement the person was engaged in conversation, so as to prevent the chest being unusually distended with air.

† Of the 628 men of the 58th regiment examined—

1 man's chest measured 29 inches but under 30 inches.			
1	....	30	.... 31 ..
6	....	31	.... 32 ..
27	....	32	.... 33 ..
49	....	33	.... 34 ..
97	....	34	.... 35 ..
145	....	35	.... 36 ..
133	....	36	.... 37 ..
85	....	37	.... 38 ..
56	....	38	.... 39 ..
19	....	39	.... 40 ..
7	....	40	.... 41 ..
0	....	41	.... 42 ..
1	....	42	.... 43 ..
1	....	43	

It therefore appears there is very little difference in the magnitude of the chest of the two races of men. The small amount of difference disappears when the comparison is made in the following manner:—

Table shewing the average circumference of the Chest of the natives of New Zealand and the natives of Great Britain at different periods of life.

Ages.	New Zealanders.		Natives of Great Britain.	
	Number observed.	Average number of inches round the Chest.	Number observed.	Average number of inches round the Chest.
From 16 to 21 years.	46	33 · 32	47	34 · 90
.. 21 to 25 ..	40	35 · 82	274	35 · 55
.. 20 to 30 ..	47	35 · 92	283	35 · 91
Above 30 ..	11	35 · 95	83	35 · 76
	144	35 · 26	617	35 · 71

It will be seen that from 16 to 20 years of age the New Zealanders' chests are more than half an inch smaller than those of the soldiers: after this age the similarity in the two races is very great.

At first sight it might be expected, as the English are a taller race, their chests should be larger; but it has been found by the measurement of 1400 recruits by Staff-Surgeon Balfour, that stature has not a very great effect on the girth of the chest.

On the Physical Strength.

Having had weights arranged so that they might be raised from the ground with both hands, I collected 31 New Zealanders, and found they raised the following number of pounds avoirdupois:—

6	New Zealanders raised	410 to 420 lb.
2	.....	400 to 410 ..
5	.....	390 to 400 ..
3	.....	380 to 390 ..
6	.....	360 to 380 ..
5	.....	340 to 360 ..
2	.....	336 ..
2	.....	250 to 266 ..

The mean weight raised by these men was 367 lb., the greatest 420 lb., the smallest 250 lb.

I then got 31 soldiers taken indiscriminately, whose average weight was 10 stone 4 lb. without their clothing, and found they raised from the ground, with the same arrangement of weights, as follows :—

2	Men raised	504 lb.
8	....	460 to 480 lb.
14	....	400 to 460 ..
9	....	350 to 400 ..

The average weight raised by these 31 soldiers was 422 lb. or 55 lb. more than the men of New Zealand. It is therefore obvious that in physical strength the English are far superior to the New Zealanders.

The New Zealanders taken for this trial were chiefly on the Government works, men accustomed to lift weights, and better fed than many of their countrymen.

Perron, in his "*Voyages des Decouvertes aux Terres Australes*," states that the weakest Frenchman was equal in the hands to the strongest man of Van Diemen's Land; and the weakest Englishman stronger than the strongest New Hollander. If such be the case, the natives of New Zealand, although inferior to the English, are much superior to the natives of New Holland.

Concluding Remarks.

From the foregoing facts, the following results are deduced :—

1st. That the men of New Zealand are about a quarter of an inch lower in stature than the soldiers of the 58th regiment, and that there are comparatively few men among them above 5 feet 11 inches.

2dly, That the average height of the New Zealanders is half an inch higher than the mean height Haller states the men of the temperate countries of Europe to be.

3dly, That the New Zealanders do not reach their full stature until they advance over 20 years of age.

4thly, That the bodily weight of the natives of New Zealand and of the men of the 58th regiment is very similar.

M. Quetelet, in his investigations on the weight of the

human body, states as the results of his inquiries, that the mean weight of males at—

	st. lbs. oz.			
17 years of age is	8	4	5	avoirdupois.
18 . . .	9	2	9½	..
20 . . .	9	6	7½	..
25 . . .	9	12	12	..
40 . . .	10	0	6	..

M. Quetelet's observations were made among the natives of Belgium, and from it we are obliged to infer that the natives of that country are of less bodily weight than the New Zealanders.

5thly, That after 30 years of age the New Zealanders increase in weight, but that after this, soldiers lose flesh.

6thly, That about 20 years of age the English are more developed than the New Zealanders.

7thly, That the mean girth of the chest of both races is very similar.

8thly, That the New Zealanders are in physical strength inferior to the inhabitants of Great Britain.

The great difference between the two races in physical strength is what would not be expected from their similarity in stature, weight of body, and magnitude of chest.

This result I am inclined to attribute solely to a large proportion of the New Zealanders' food being composed of vegetable matter, a diet which it is said* tends to develope the accumulation of fat in the system, without adding much, if at all, to the substance of the muscles.

To those who delight in thinking that the world is degenerating, and that men were stronger in olden time, before trade and civilization had changed the manners and customs of men, the foregoing facts may prove interesting, for here we observe the New Zealanders, a race just emerging from the darkest savage state, and we find that in physical strength they are much inferior to men drawn from a country where machinery and civilization have produced changes in the manner and habits of the people to an extent unknown among other civilized races.

(Signed) A. S. THOMSON, M.D.

Surgeon 58th regiment.

Auckland, New Zealand,
10th June 1850.

* Liebig.

OBSERVATIONS
ON THE
HISTORY OF THE INCAS OF PERU,
ON
THE INDIANS OF SOUTH PERU,
AND ON SOME INDIAN REMAINS IN THE PROVINCE OF
TARAPACA.

By W. BOLLAERT, F.R.G.S.

Read 12th May 1852.

THE origin of the term Peru is involved in some obscurity. It appears to be derived from Biru, the name of a river. In the north is the province of Biru-quete, and the ancient inhabitants of Quito were called Puru-ayes and Puncays.

Peru, in the Quichua language, is Taguantin-suyo, or the four quarters of the empire of the Incas: the people, Inca-prunam, runa signifying man.

Columbus, believing, when he made his great discovery that he was at the extremity of Asia, called its inhabitants Indios.

Inca, Inga, Inka, or rather Ynca, may be derived from Ynti, the sun. I do not find the word Inca in the Quichua works I have had access to, and am inclined to think the word may belong to the Incas language, which is now lost, as well as Manco, and some others: the first ruler called himself Manco; and Capac, now found in Quichua dictionaries, meaning rich in virtue, was subsequently added. In the early history of the Muyscas of Bogota a chief Hunca-hua was chosen as a ruler; and Cundinimarca was originally called Hunca. Peru, not long since, was known as Upper and Lower: the former, since the separation of the American colonies from Spain, bears the name of Bolivia. Lima, the capital of Peru, was anciently called Rimac-Malca, or place of witches; it being the custom, before the establishment of the Incarial

power, as well as afterwards, to banish to this valley those accused of witchcraft, the climate being considered unhealthy.

The half-Indian city of Arequipa is reached from the Port of Islay, by crossing the mountains of the coast, then along an elevated desert plain, covered in many places with sand, medianos, or crescent-shaped sandhills, and volcanic ashes. Arequipa is situated at the base of the active volcano of the same name, formerly called Mistie. The city is large and picturesque, the houses built with stone, and vaulted. The Plaza in particular presents an animated appearance, the Indian population, with their stalls laden with provisions and other wares, give it a particular and interesting character.

The origin of the name of Arequipa appears to be the following:—Some Indians who were travelling with one of the Incas, as was the custom of those monarchs to visit periodically their country, arrived there, when the Indians expressed a wish to remain in that fruitful valley, and found a city. The Inca, in answer to the request, said, “Ari-que-pac,” or “Yes, remain if the land pleaseth ye.”

As the port of Arica is approached from the sea, barren, undulating, and broken land is seen, and in its rear ranges of sterile mountains, and, farther to the east, the icy peaks of the Andes, towering majestically above all. Forty miles inland from Arica is the flourishing town of Tacua, where there are many Indians.

The south coast in particular is formed of arid and elevated mountains, being a continuation of the uninhabitable desert of Atacama: in the north the coast is lower, and where there is another desert, that of Sechura. Peru has three great divisions—Los Valles, or cultivable ravines, between the Pacific and the western chain of the Andes,* or possibly from

* The terraced steps of land of the Indians were by the conquerors called Andenes, which probably induced the Spaniards to give the name of Andes to the entire ridge of the Cordillera. The gardens of Shalimar, in Kashmere, are of this description. At Engaddi, in the Dead Sea, there are similar terraces.

That part of Thibet which is near the British frontier is called Undes. Dr. Wilson derives the word from Hiundes, the snow country, or Hundes, the country of the Huns: however, in Quichua, “Snow country” would be “Ritti-suyo.”

the nation of Antis (but not from the Quichua word "Anta"—copper); La Montaña, or the elevated mountain region between the west and east chains, where but a few trees and a little pasture is met with; and lastly, the great eastern region, with its mountains, where rise the head waters of the Amazon and other great rivers; as also the home of many tribes of Indians but little known, and who inhabit dense tropical forests.

To go somewhat into detail, the features of the country are as follows, particularly of the more southern part, and through the province of Tarapaca in 20° S.

1. Arid porphyritic mountains of the coast, containing gold, silver, copper, &c. From one mining district, that of Guantajaya, a few miles inland from the port of Iquique, 20° 12' S., 70° 14' W., since its discovery in 1726 to 1851, has yielded about fifteen millions sterling. Water has to be conveyed to these mines in skins from the interior. Some of these groups of mountains, rising to nearly 6000 feet above the sea, are entirely destitute of vegetation, and which is only seen where a stream from the Andes may run. As it seldom or ever rains in these latitudes, the surface of the country has remained, and may for ages, in the same state, unless disturbed by earthquakes or other volcanic agency. The hollows and plains are covered with sand, salt, and other saline bodies; the shores yield large quantities of guano, and from 1838 to 1852, of more than one million tons of this valuable manure imported into this country, Peru has contributed more than one half.

2. Extensive sandy desert plains succeed from 3000 to 4000 feet above the sea: one in particular, on the south, the Pampa of Tamarugal, from whence, since 1831, no less than 240,000 tons of nitrate of soda has been sent to this country (the larger portion by my friend and old fellow-traveller, Mr. Smith), used as a fertilizer, in the manufacture of nitric and sulphuric acids, glass, &c. Borates of lime and iodic salts have been discovered in this plain by Mr. Smith. The borate is likely to be useful in glass-making, pottery, and smelting. Here some Tamarugo or Algarbo trees (of the acacia family) are met with.

3. Another range of arid mountains, of 7000 to 8000 feet, succeeds; then,

4. An elevated district follows, where, for the first time, cacti and a few small trees are seen, nourished by a little rain; and, ascending still higher, vegetation ceases at about 16,000 feet. Here we now are at the real bases of the Andean groups, where, amongst other elevated mountains, that of Lirima, in $19^{\circ} 47'$ S., $69^{\circ} 12'$ W., is supposed to be from 24,000 to 25,000 feet. Many quiescent volcanoes, and some active ones—that of Isluga, 17,000 to 18,000 feet, with its five craters—are in the province of Tarapaca, the existence of which was first made known in Europe by Mr. Smith and myself in 1827. Salt and other saline compounds are found at these great elevations (in this Thibet on a small scale): their origin, I am inclined to think, are volcanic. In a paper read before the British Association, in 1852, “On the distribution of common salt and other saline bodies, with a view to shew their primary origin and subsequent formations,” I have entered fully into the subject.

5. Is an elevated undulating region called the Mountain knot, or Cordillera of Potosi, in Bolivia, where are the elevated peaks of the golden Illimani and snowy Sorata: further on are the eastern mountains and descents into the great plains beyond.*

During a residence of some years on the coast in latitude 20° S., I only once saw a slight shower of rain. The winds are from the south during the day; at night they are easterly, blowing off shore, depressing the temperature of the atmosphere, when dew is formed: a calm succeeds; and as the sun appears in the morning it heats and puts the air in motion, giving rise to the warm southerly winds, which vaporises water from the ocean, to be again deposited as dew; but as little of this falls on the land, owing to the general set of the winds being off shore, will account in a great measure for the desert character of the coast of Peru.

Of a population of about 2,000,000 in Lower Peru, there are not more than 100,000 Indians, the rest being descendants of Spaniards, and various mixtures, some thirty or forty, with Indians and Negroes.

* See “Observations on the Geography of Southern Peru.” By W. Bollaert—Geographical Society’s Journal, 1851.

Bolivia, or Upper Peru, is from 9° S. to 25° 30' S. It has a very considerable range of climate, and varied mineral, animal, and vegetable productions. Here is the great Lake Titicaca (*Titi*, "lead;" *caca*, "mountain," in the Aymara country, as also the silver mountain of Potosi. Bolivia has a mixed population of about 1,400,000, the Indian predominating.

The Aymara natives may be traced from the Lake of Titicaca, in about a south-east direction, through the province of Tarapaca to the coast; and, under the Incas, their morality was so simple, that it was comprehended in the three following principles—"Ama sua, ama qualla, ama llulla—No thieves, no sluggards, no liars."

Before the times of the Incas, although it is stated that the Indians generally were in a very barbarous state, still there were many powerful nations among them, one of whom were the ancient Aymaras, who erected large stone buildings, and other works: the ruins of pyramids, and statues of Tia-Huanacu, north-west of La Paz, in the Aymara country, are of that early period. In Vol. I. "*Mercurio Peruano*," p. 204, it is said that the origin of Tia-Huanacu is without doubt anterior to the times of the Incas: the formidable pyramid, the immense stone statues, also a variety of human figures, well carved, although much affected by time, shew them to have been monuments of some great nation. Cieca de Leon says that some of the stones at these ruins are thirty-eight feet long, eighteen broad, and six thick, whilst those at Cannar, built by the Incas, are only eight feet long; that the place seems never to have been finished; and that the natives attribute the construction to a race of men who inhabited the ridge of the Cordillera long before the foundation of the empire of the Incas. According to Pentland, Tia-Huanacu is 12,900 feet above the sea, and near a stream which runs into the south end of Lake Titicaca; and he places the ruins of Callacanchi, Lachesi, Paroparo, and Kenallata, on the east shore of the lake. It would be interesting to know the history of these ruins, if they are of the Incarial period, of that of Tia-Huanacu, or of any other.

Peru, this ancient and enigmatic empire of the Incas—this Egypt of the new world—its regal and theocratic form of

government, can only be traced to about A.D. 1100, which period may be given as the commencement of the reign of Manco Capac, and ending with the death of Atahualpa in 1533.

Writers are now generally agreed that the peopling of the New World has been from Asia, say by the Aleutian Islands, *but at a very early period.*

Mr. Ranking, some years since, gave as his opinion the Asiatic origin of the Peruvians in the thirteenth century, and that Manco Capac was the grandson of Ghengis Khan, and that the term *Inga* came from the Mongul word *Ungut*.

In Danish, Swedish, and Chinese history are found the names of kings, such as Ingar, Ingo, Inguar, Ingell, Ing-tsing, and Ing-wang, which appear to have about as much value as to the derivation of Inca as the Mongul word "Ungut."

Humboldt, in Vol. I. "Travels," alluding to the Quichua for the "sun," *inti*; "love," *munay*; "great," *veypul*, mentions that in Sanscrit the "sun" is *indre*; (Wilson says, *surya*); "love," *mayna*; "great," *vipulo*. These are the only analogies that have been found, but the grammatical character of the languages is totally different. "Food," in Quichua is *micunnam*; in Malay *macannon*.

In 1815 a Chinese, or Japanese junk anchored in the Port of Iquique, when the strangers visited the silver mines of Santa Rosa, a few miles inland, and then departed. A question has been raised from whence the Sandwich Islands were peopled, if from America or Japan, for Japanese junks have been drifted ashore on the Sandwich Islands.

I have heard it stated, that in a valley near Truxillo, the inhabitants of which are not desirous of mixing with surrounding tribes, and who, on being visited by Chinese not long since, appeared to have but little difficulty in understanding their Asiatic visitors.

With the discovery of the gold regions of California, in 1848, there were then in that country only two Chinese men and one woman; but early in 1852 there were 47,000 Chinese. Chinese are also emigrating to the gold regions of Australia. The latter end of 1852, 300 Chinese sailed from San Francisco for Hong Kong, and had taken 70,000 dollars of gold dust

with them. Mr. Sidney, in his work on the Australian Colonies, states that there are traces of Chinese in North Australia. They have at present a settlement on the Island of Timor, 250 miles from Cape York, and are in the habit of resorting to the coast to collect the Chinese dainty, the trepang, or sea-slug. In December 1852, we are informed that ship-loads of Chinese from Amoy are arriving in Australia to serve as shepherds and servants; and soon we may hear of Araforas, Maoris, Hindoos, Cape Caffres, &c., wending their way thither. Here, then, are disturbing causes as to races.* Again, Acapulco, 16° 30' N. (from whence the Spanish galleons traded to Manilla); the inhabitants are a mixture of Spaniards, Indians, Negroes, and Chinese, and which in some families have produced a new race, and similar to the Malay. In some of the cities of Spanish America particularly, where Negroes were taken as slaves, the mixture has produced strange varieties of the human race. In a boat voyage I made along the coast of the Desert of Atacama in 1828, from Cobyá to Paposo, my crew consisted of the pilot, who was a Chilote, a mixture of the Chilian, Indian, and Spaniard, an Aymara Indian, a Malay (the cook), and two powerful Kanakas or Sandwich Islanders.

The Mongolidæ are said by Dr. Latham to consist of seven great divisions, the sixth being the American, which we find extending from the shores of the Arctic Sea through the whole length and breadth of the New World to the rocky Archipelago of Tierra del Fuego.

The ancient monuments, particularly of the valley of the

* The natives of Esmeraldas, Rio Verde, and Atacames, are Zambos, apparently a mixture of Negro and Indian. The tradition is, that a ship having Negroes on board arrived on the coast (for soon after the conquest great numbers of Negroes were taken from Africa to Panama, and from thence to the coast of Peru), and having landed, killed a great number of the male Indians, kept their widows and daughters, and thus laid the foundation of the present race. Their language is different from the Quichua, which is the general one of the Indians, being rather nasal, and appears scanty of words. A woman is *teona*; a man, *qual-teona*; a bitch, *shang-teona*. It is, however, not inharmonious, and some of their songs are not devoid of melody. They are very honest and truthful.

Mississippi and north of Mexico, the civilization of *Anahuac*, Bogota, and Peru, were peculiar to those great divisions of the New World, and may be said to have originated there.

As to the origin of the Incas, the following is the generally received tradition—that Manco and his sister, or wife, the Ccoya, came amongst a wandering horde of Indians on the borders of Lake Titicaca. They announced themselves to be children of the sun, which luminary, as well as every thing else, had been made by Pacha-Kamak, God, or the creator of the universe, (Pacha-Kamak was also called *Vira-cocha*), and to be commissioned to improve and civilize the country. The Indians listened with respect to the words of the supposed messengers from the sun, and were easily induced to obey, following them to the spot where Cuzco (Ccozecoo, “central” or “navel”) now stands, and erecting a city.

Garcilasso alludes to two other traditions: one is, that a man appeared at Tia-Huanacu (the mention of this locality induces me to think that the Incarial race may have sprung from one of the ancient Aymara nations), who divided the country into four parts, and gave them to four chiefs—Manco, Colla, Tocay, and Pinhua. Manco went to the north, founding Cuzco; but of the other three nothing is known. The other tradition is—that in the beginning of the world, at Paucartambo, four men and four women, brothers and sisters, came out of some openings that were in some rocks: the names of the men were Manco, Ayar Cachi, Ayar Uchu, and Ayar Saucá. Manco founded Cuzco, but of the remaining three there are no accounts.

Herrera relates the following:—At Pavac Tampu, “the shining dormitory,” or “house of veneration,” eight leagues south of Cuzco, there appeared three men and three women: the name of the former were Ayarache, Ayranca, and *Ayramanco*; and of the latter, Mama-cola, Mama-cona, and Mama-raña, clothed so beautifully that they were called tocabo or royal. They had a golden sling, which was endowed with peculiar virtues, produced abundance of wrought silver, assumed the government of the country, and built Pacavec Tampu. Ayarache, having got the sling into his possession, overturned mountains, and gained such a superiority, that his

brothers, jealous of his power, devised a scheme to destroy him. They persuaded him to enter a cave for a precious vessel which they had left there, and pray to their father the sun, to assist them in the conquest of the country. Ayarache entered the cave, when his brothers blocked up the mouth with stones; upon which a violent earthquake was felt, which overturned mountains and entombed hills, woods, and rocks in the bowels of the earth.

Ayarache was afterwards seen flying through the air with painted wings, and a voice was heard telling the two brothers not to be afraid, for Ayarache was going to found the empire of the Incas. Ayarache then discovered himself to his brothers, and desired them to build a temple where Cuzco now stands, in which the sun should be worshipped. They went to the hill of Guonanere, and there raised altars to Ayarache. Ayra-manco was chosen Inca, after which Ayarache and Aranca were converted into stone statues. Ayra-manco and the women founded Cuzco, he taking the name of Manco Capac.

Approaching our own times, another tradition has appeared: the best version is given by Stevenson, in Vol. I. of his "Narrative."

A white man was found on the coast by a Cacique named Cocapac; by signs he asked the white man who he was, and received for answer, an Englishman; (or rather say, some word of a similar sound). The stranger lived with him, till a daughter of the Cacique (who is said, in another version, to have been born blind) bore him a son and daughter, and then died. The old man called the boy Ingasman Cocapac,* and the girl Mama Oelle: they were of a fair complexion, had light hair, and were dressed in a different manner from the Indians. From accounts given by this stranger of the manner in which other people lived, and how they were governed, Cocapac determined on exalting his family; and having instructed the boy and girl in what he proposed to do, he took them first to Cuzco, where one of the largest Indian tribes

* It is easy to make Inga Manca Capac out of this, but how far much reliance can be placed is a question.

resided, and informed them that their god (the sun) had sent them two of his children to make them happy, and to govern them. He requested them to go to a certain mountain on the following morning, at sunrise, and search for them: he moreover told them that the *Vira-cochas*, children of the sun (*Vira* probably means "those people;" *cocha*, "from over the sea or lake"), had their hair like rays of the sun. In the morning the Indians went to the mountain of Condor-urco, and found the young man and woman; but, surprised at their colour and features, declared them to be a wizard and a witch. They now sent them to Rimac Malca, the plain on which Lima now stands; but the old man followed them, and next took them to the neighbourhood of Lake Titicaca, where another powerful tribe resided. Cocapac told these Indians the same tale, but requested them to search for the *Vira-cochas* on the edge of the lake at sunrise. They did so, and found them there, and immediately declared them to be the children of their god, and their supreme governors. Elated with this success, Cocapac was determined to be revenged on the Indians of Cuzco. For this purpose he privately instructed his grandchildren in what he intended to do, and then informed the tribe that the *Vira-cocha* Ingasman Cocapac had determined to search for the place where he was to reside. He requested they would take their arms, and follow him, saying, that wherever he struck his golden rod or sceptre into the ground, that was the spot where he chose to remain.

The young man and woman directed their course to the plain of Cuzco, where being arrived, the signal was given, and the Indians were surprised by the re-appearance of the *Vira-cochas*, and, overawed by the number of Indians that accompanied them, acknowledged them as their lords, and the children of their god.

I. Inca, Manco Capac—Ccapac Apu, king or ruler—is said to have appeared on the shores of Lake Titicaca, and about A.D. 1100 may be fixed as the period, with his wife or sister, some of whose names are the following:—Ccoya (female), Manca, Oclo or Ocallo (sacred), Huaca or Vaco (beautiful), and Ccapac Ccoya, a queen.

There is no historical record from whence the Inca came,

and but very few words are preserved of the language spoken by the first Incas; for under the fifth the Quichua and Aymará natives were conquered, when the former became the principal language; and although it is probable that some words of the Incas language are mixed with the Quichua and Aymará, we may, however, conclude that their language is lost.

Cuzco or Cosco was commenced by Manco, and is seventy miles north-west from Lake Titicaca, his dominions extending on the north to the River Pancartambo, on the east eight leagues, on the west to the Apurimac, and nine leagues on the south to Quequesama. Manco had other appellations, such as Huac-chacuyac, "the friend and protector of the poor;" Yntip-churni, "child of the sun." "He gave to his people a code of admirable laws, reduced them into communities, and then ascended to his father the sun."

II. Sinchi Roca (*Sinchi*, "valiant;" *Rucu*, "aged"), son of Manco. His wife was Ocallo Coya. He was the first to be served in vessels of gold and silver.

III. Lloqui Yupanki. (*Eloqui*, "left handed;" *Yupanki* is said to be a very expressive word, one of the meanings, that he was capable of great deeds. He was the eldest son of Sinchi Roca, and his queen was Coya Cava, or Anavarqui. He subjected to his rule the Canas and Ayviri, and built fortresses. The Collas, a nation composed of several tribes, were conquered by him, as well as the Chucuytus; then towards Titicaca, the Hillari, the Challu, Pamata, and Cipita, were joined to his kingdom. He conquered the populous country of Hurin-Pacaca. He was the first Inca who invaded the territory on the coast, of a powerful chief, the Chincú or Chimu, whose capital was at Truxillo, The Inca Pachacutec induced the Chimu of his day to swear allegiance to him at the Chimu's palace and fortress of Paramonga, five miles from Patavilca, 10° 50' S. However, in 1420, Huayna Capac led an army against the Chimu, or king of the coasts. Stevenson says, that in the plain of Truxillo are the ruins of the ancient city of the Chimus: they buried their dead in Huacas, and out of one, in 1574, 150,000*l.* of gold was extracted.

Near Lambayeque is the village of Eten, inhabited by In-

dians: they are the only people who speak the Chimu dialect, which is the original language of the coast of Peru; and so different from the Quichua, that Stevenson could not understand a single word, or trace any analogy, and beyond the limits of their town their language is unintelligible.

In the vicinity of Lagunilla, and not far from Cajamarca, are the ruins of a curiously built Indian town, which was probably the residence of the Chimu of Chicama, when he resided in the interior of his territory, and before he was subjected by the Incas.

IV. Mayta Capac, son of the preceding. He is called the reformer of the calendar. Coya Cuca, or Yachi, was his wife. He commenced his conquests by going to the south part of Lake Titicaca, and subjecting the people of Tia-Huanacu. Pazos, in his letters,* says, "In the village of Tia-Huanacu are the ruins of a palace of Mayta Capac, which is now little more than huge stones placed one upon the other;" also "ancient walls built by the Incas thirty miles long, reaching from the top of the Cordillera to the shores of the Lake of Titicaca."

These ruins must not be confounded with the more ancient ones already mentioned, and even the name of Tia-Huanacu is comparatively modern (its original name being lost), and was so called in consequence of one of the Incas being at that spot, and receiving some important news brought by a messenger, who had travelled with extraordinary speed, when the Inca said to him, in praise of his exertions, "Tia-Huanacu," or, "Rest thou, Huanaco;" thus comparing his celerity with that of the fleet Huanaco.

Mayta Capac conquered the Cacyaviri, Mallanca, and Huarina. In the west his arms were victorious to the shores of the Pacific, particularly over the Cuchuna. Having made himself master of the districts of Llaricassa, Sancavan, Solla,

* See an interesting and rare work, "Letters on the United Provinces of South America, by Don Vicente Pazos, New York and London, 1819. Pazos was a native of La Paz, of the Aymará family of Silvas Arandos, Cacique of Carabaya Ylabaya. Pazos was Consul for Buenos Ayres in London, 1835; subsequently Consul-General for Bolivia, and died in Buenos Ayres in 1852.

and all the tribes from Huaycha to Callamarca, Mayta Capac, went twenty-four leagues further, to Caracollo, and the Lake of Parca, 19° S., through the country of the Chaccas, and from thence, turning east, entered the country of the Antis, a nation remarkable for cruelty to their prisoners. Valera says they were cannibals, and never conquered by the Incas. Some nations in this direction submitted to this Inca even to the Valley of Chuquiapa. Wishing to extend his empire further to the east, he caused a swinging bridge to be thrown over the Apurimac, to the east of Cuzco; and having traversed the desert of Conti-suyo, he subjected the peaceful people of Tannima, Gotahuaci, Parihuana-cocha, Pumatampa, Arumi-Collahua, unto the valley of Arcypa, or Arequipa. He was succeeded by his son.

V. Capac Yupanki, whose queen was Coya Cava, or Curyllpay. His first conquests were over the Yanahuara. The extended country of the Aymará nations about Titicaca fell under his sway. Garcilasso says, from the district of Piti this Inca passed into the country of the Amayra (Aymará), where no less than eighty nations were assembled to oppose him. The Aymara country was called by the Incas Uma-suyo—a country of waters—that is, of the Lake Titicaca and its rivers.

Entrusting an army to his brother Anqui-Titu, who proceeded to Colatampa and Colanna, south-west of Cuzco, inhabited by part of the Quichua nation, which was conquered without opposition, this same army entered the country of Huamanpalpa, and the lands of those tribes on both sides of the River Amancay, west-north-west of Cuzco, people belonging to the Quichuas, were subjected. The valleys of Huacari, Uvinna, Camana, 16° 12' S., Caravilli, Pietaquelca, as well as the valleys in the Pacific, submitted to his arms.

At the head of an army, the Inca went himself against the people of Lake Paria. Resolved to penetrate into the country of Collasuya, he traversed the districts Tapac-ric, and Cochapampa, 18° 20' S., and entered the country of Chayanta, where all the Curacas, or chiefs, hastened to do him homage.

Covered with glory, this Inca returned to Cuzco, whilst his eldest son, Roca, conquered the countries of Curahuari, Amancay, Sura, Apucara, Runcana, and Hatunrucasca, from

whence he descended to this coast, subjecting those of the valley of Mansaca, as well as all the country between it and Arequipa. Capac Yupanki made a statue of gold, and called it Ynti-lapi.

VI. Inca Roca: his wife was Coya Micay. His first expedition was against the Chinchasuya, Tacmara, Quinullai, Cochacaca, and Curumpa. He was then successful in the lands of the Anta-hualla, inhabited by several tribes called Chancas; also in the districts of Homohuallo, Tunsulla, Ramarcu, Villca, and others. In his second expedition he went to the east of Cuzco, reducing the small nation of Challapampa, and took possession of the lands of Havisca and Tuna. The country beyond this being uninhabitable, and covered with marshes and stones, here terminated his conquests towards the east. His third expedition was to the extended country of Charcas, where he reduced the Picunca, Muyamaya, Misqui, Sacaca, Machaca, Curacara, unto Chuquisaca, $19^{\circ} 30' \text{ S. } 66^{\circ} 40' \text{ W.}$

VII. Yuhuar-Huacac (the first word means "blood;" the second, "to weep") succeeded his father Roca. Chichia was his wife. He sent an army under his brother Mayta, who conquered the country of Colla-suya, which is between Arequipa and Tacama. This Inca's eldest son, afterwards known as Vira-cocha, gave him much trouble, when he was exiled to Chita, where he remained three years. About this time the people of Chanca, Uramarca, Villea, Ultasulla, Humo, and Huallu, rebelled against the Inca, and marched upon Cuzco. The Inca retreated to Collasuya, and the people of Cuzco fled from the city, when some of them met Vira-cocha, informing him of the revolt, as well as of the flight of his father, whom he succeeded in joining, and persuaded "all the Incas of royal blood," amounting to 4000, to return with him to Cuzco, where he formed an army of 10,000 men. The Quichuas, Aymarás, Catacampas, Cotanecas, and others, 20,000 strong, joined the standard of Vira-cocha; battle was given to the Chaucas, who were defeated at Yahuac-pampa, or field of blood. Vira-cocha now took the government of the empire into his own hands, and sent his father to a place of retirement called Muyna. It would appear that Vira-cocha had some share in the rebellion against his father.

VIII. Inca *Vira-cocha*—from the fair phantom king he said had appeared to him when in exile. His queen was *Coya Runta*, “fair, or as white as an egg.” (After the VIIth Inca, *Alcedo* mentions the Inca *Ripac*, who may be the same as *Viracocha*, and that he conquered *Tucuman*; also the Inca *Urco*, who was deposed after eleven days). *Viracocha* built a palace in the valley of *Muyna*, on the river *Yumay*. He resolved to conquer the districts to the east of *Carama*, *Ullaca*, *Llipi*, and *Chica*, giving the command of the expedition to his brother, *Palmac-Mayta*—“he who flies.” The Inca himself proceeded to the north of *Cuzco*, making himself master of the people of *Huaytara*, *Pocra*, and *Huamanka*, (*Guamanga*, 13° S. 74° W.) *Asamarca*, *Parac*, *Pique*, and *Acos*. He cut a canal from the mountains of *Parcas* and *Pecui*, to *Rucanes*.

Before returning to *Cuzco*, *Viracocha* went to *Charcas*, when he received an embassy from the King of *Tucma* (*Tucuman*, 27° S. 65° W.), who became subject to him. *Humo-Hualla*, a chief, not contented with the government of *Viracocha*, persuaded many to emigrate with him, which they did probably in an eastern direction. The chief of *Chaucas* also retired “200 leagues from his own country;” and *Viracocha* found it necessary to command other nations to take possession of the vacated lands.

The tomb of *Viracocha* was in the valley of *Xaxahuma*, six leagues from *Cuzco*: it was opened by *Emzalo Pizarro*, who plundered it of its gold. *Garcilasso*, who saw the bodies of *Viracocha*, *Yupanqui*, and *Huayna Capac*, says that the first must have been very old when he died, for his hair was as white as snow.

IX. *Pacha-cutec* “change-world” succeeded his father *Viracocha*. His wife was *Anavarqui*. His first conquests were over the *Huama*, and the country of *Sansa*, or *Xanja*, 11° 50' S.; also over the wandering tribes of *Churcupu*, *Amaraa*, and *Huayllas*, 9° S., *Pisco-pampa*, *Chuncuca*, and *Huamachaca*: the victorious army then entered the country of *Cassa-marca*, 7° 10' S. 78° 30' W., and *Yanya*. In the third war the people of *Ica*, 14° 10' S., and *Pisca*, 13° 45' S., on the coast, submitted without opposition. The *Chinchas*, 13° 25' S., also, after some resistance. The Inca's army marched into the

valleys of Runahuac, Huarca, Malla, and Chilca, 12° 30' S., where the Curaca, or chief Chuqui-manca, after a siege of eight months, submitted to the Inca.

The valleys of Pachacamac, Rimac-malca, Chancay, and Huaman, composed a small state under Quismanca, who became his ally. This chief had at Pachacamac a temple in honour of the idol Rimac, or Rincac (which means, "one who speaks, an oracle"). The architecture of this district may have been of as old a date, or even older, than that of Tia-Huanacu.

This Inca's arms entered the country of an old enemy—that of the powerful Chincu, or Chimu, who possessed the valleys of Pumunca, Huallmi, and Huarapa (Truxillo). Miller says, "Near Guambocho are the remains of an extensive line of fortifications, constructed previous to the conquest. A battle was gained here by the Inca over the Chimu, the last king of the province called Truxillo." The Quichua became the general language, but the Aymarás and Chinchisuyo were cultivated: still the Incas had a language of their own, and only understood by them; and, when Garcilasso wrote his history, it was quite lost; for as the empire was annihilated, so was the language of the Incas. The Collas and Paquinas (Aymarás), satisfied with their's, held in contempt that of Cuzco, viz. the Quichua. On the death of this Inca he left his empire to his son.

X. Yupanki, whose wife was Chimpu Ocallo (Chimpu is a coloured thread or fringe, the redness of the sky, and the halo round the sun or moon). The Musas became his allies. He marched against the Chirihuanos, but was not successful. He then projected an inroad into Chile, about 1440, giving the command of the army to Sinchi-cura, who subjected the Copayapenicás (Copiapo), those of Cuquimpu (Coquimbo), and his army went as far as the river Maulli (Maule), where the Purumacuas, Antalli, Pienca, and Canquis (Araucanos), formed a coalition, and, after much fighting, forced the Peruvian monarch to fix his somewhat problematical boundary at the river Maule in Chile. He was succeeded by his son.

XI. Inca Tupac Yupanki (the brilliant). His wife was Coya Ocelo. He formed expeditions against the countries of

Huacrachuca, Chuchapuya, 6° 15' S., Muyapampa, Ascayuma, Humapampa, Casa, Aya-huaca, and Callua; also against Huanucu, 10° S., 75° 40' W., Cannaris, and Tumipampa. He gave the command of the conquest of Quito to his son, Huayna Capac, who went onwards to Pastu, 1° 10' N. Stevenson, in his valuable narrative, observes, that the language of the Malaba Indians of the river San Miguel, in Esmeraldos, resembles the Quichua. When he visited them about 1815, the name of the chief was Cushi-cagua, and his tribe consisted of 200 Ishcay huarango families, and, according to their traditions, they are descendants of the Puncays of Quito, but were never conquered by the Incas. The oral traditions of the Indians of Quito, before the time of Huayna Capac, are very trifling; the language spoken by the Puncays is unknown, having been superseded by the Quichua.

XII. Inca Huayna Capac (the youthful). It is stated that he had four wives—1. Pilen (a wreath of flowers); 2. Huaca (beautiful); 3. Rava Ocallo, the mother of Huasca; 4. A Toto-pulla, named Pacchachire, the mother of Atahualpa: she was the daughter of the conquered chief, or Quito, known also as the Coucho-cando, Scyri, or King of Lican, the name of the ancient capital of Quito, the nation being called the Puncays. This Inca added to his empire the valleys of Chacma, Pasmaga, Zanna, Collque, Cintu, Tucmi, Sagama, Mutups, Pichia, and Tullana, which are between the valleys of the Chimu and Yumpri (Yumbez, 4° 30' S.). The neighbouring tribes of Chunana, Chintuy, Collonche, and Yaquall, became his subjects, as well as those of the island of Puná, 3° S., whose chief was named Tumpalla. After a time he turned his arms against the country of Munta, inhabited by the Apechique, Pichusi, Sava, Pullansinique, Pampahuaci, Saramissa, and Passau.

A rebellion broke out among the Caranquins, whom he severely punished: the heads of the rebels were thrown into a lake, which from that day has been called Yanhar-cocha, or lake of blood. The Indians of Paraguay made some successful inroads into Peru during the reign of this Inca, some of the spoil being gold and silver ornaments.

Huayna Capac being at his palace of Tumi-pampa, the news

were brought to him of the appearance of the Spaniards on his coast. This Inca died shortly afterwards, according to Garcilasso in 1527: Herrera says 1525, and Alcedo 1529. Quito was given to Atahualpa, the empire to Huasca. The population of Peru at this period is supposed to have been more than 10,000,000. In 1575 it is said to have been 8,280,000.

XIII. Inca Inti-cusi Huallpa, or Huascar (Inte-cusi means "son of joy"; Huasca, from the golden rope or chain that went round the great square of Cuzco, made to commemorate his coming of age. He reigned about eight years, when he became the prisoner of his brother Atahualpa, by whose order it appears he was killed, in 1533, at Andamarca.

XIV. Inca Atahualpa (Hualpa is a fowl or cock in Quichua). He reigned five years, and was executed by Francisco Pizarro, at Cajamarca, August 19th, 1533. Like most of the Incarial family, he is said to have been handsome. His manners were elegant, his perception was remarkably quick and clear. Brave and active in war, he was also sagacious and designing in politics.

XV. Manco Capac II., brother of Huasca, killed by some of Almagro's followers.

XVI. Inca Toparpa, brother of Atahualpa, died in 1535, on his way from Cuzco to Cajamarca.

XVII. Inca Syri Tupac resigned his sovereignty to Philip II. Alcedo gives for the duration of the empire 300 years; Blos Valeru 500 to 600.

In the foregoing sketch of the history of the Incas, Garcilasso has been taken as the principal guide.

Sir I. Newton supposes 1283 as the period of the appearance of Manco; and as the death of Huayna Capac took place about 1525, will give 242 years: this divided by 12, the number of Incas generally considered to have reigned from Manco, allows twenty years for each reign. There may, however, have been more than twelve Incas. We know that the Indians lived to a great age, for grey hair does not commence in the Peruvian before 70, nor the beard in small quantities before 60. When grey they are supposed to be 100. Stevenson, who witnessed the burial of two In-

dians, one, 127, the other, 109; and, on his examining the parish books of Barrancas, found that in seven years eleven Indians had been buried whose joint ages amounted to 1207 years—nearly 110 years average age.

Don Vicente Pazos, in his "*Memorias Historico Politicos*," a few copies of which were printed by himself at his own house in London in 1834, says, "that Quintana, guided by the imperfect information of the Spaniards, gives about four centuries for the duration of the Peruvian empire; but it appears to me that four centuries are not sufficient for a nation to arrive at the state of civilization in which the Peruvians were found. If we examine into the Incarial policy, this could only have been the result of many centuries of experience."

After the fall of the Incas, Peru came under Spanish despotic dominion, with occasional risings of the Indians against their conquerors.

For a period of three centuries Spain received hoards of gold and silver from its American possessions, produced by forced Indian labour; the aborigines getting in exchange European goods, whether useful or not to them, and for which the most extraordinary prices were demanded. During such a lapse of time some progress, we might expect, would have been made in favour of the Indians, if only in the more useful arts; but no such thing occurred; all was stultified by the gloom of the cloister, the vicious habits of the priesthood, and the exacting and tyrannous character of the Spanish rulers. However, with the distracted position of Spain at the commencement of this century, the Creoles, aided by the Indians, threw off the yoke, and it is to be hoped that time only is required to perfect the work of self-government in those countries, and at the same time to ameliorate the position of the Indians. Tschudi, however, has come to the following painful conclusion: "The Indians see they have been made the tools of the Creoles. The Creoles, like the Spaniards, will draw the string of despotism till it snaps: then will arise Indian rebellions like those headed by Tupac-amaru," in 1780, that of Puma-cagua, in 1814, "but with a more successful

result. After a fearful struggle they may re-conquer their fatherland, and re-establish their ancient institutions; and can it be a matter of surprise if they wreak cruel vengeance on the enemies of their race." Tupac-amaru wrote from Tinta, March 5th, 1781, a long letter to the Visatador Areche, in which the sufferings of the Indians are stated in a calm and manly way, remedies suggested without the necessity of Peru separating from Spain, but no ear was given to the appeal of humanity. Tupac-amaru was betrayed, and cruelly butchered, with his family and the greater part of his followers. This celebrated letter is in the Appendix to the Spanish edition of General Miller's *Memoirs*, by his brother, Mr. John Miller.

The Peruvian Indians may be said to be more or less catholicised (with the exception of those on the eastern slopes of the Andes), but many of them still preserve some of their ancient rites and customs, among which is their adoration of the sun, mountains, the sea, and other objects animate and inanimate.

Cajamarca, in about 7° S. to the east of the great Cordillera, and Cuzco in particular, in 13° 30', were the principal residences of the Incas, where still live many Indians (Quichuas). In these localities, as well as in many others, are ruins of temples dedicated to the sun, palaces, generally fortified: the best in preservation is that to the N.E. of Atun-Cannar, 10,640 feet above the sea, probably built by Tupac Yupanki, such ruins being called Inca-pirca, or walls of the Incas. Pucaras, or frontier fortresses, tambos, or Andean caravanserais, baths, menageries, mines—those of Escamera, Chilleo, and Abatanis were of gold;* Choquipiña and Porco of silver; Curahuata of copper; Carabuco of lead; probably the vicinity of Oruro yielded tin; and the "magnificent" iron works of Ancori-

* Much of the golden wealth of Peru is said to have been drawn from the auriferous streams and sands of the province of Carabaya, in the district of Puno. The golden plates which roofed the temple of the sun, and the uncounted millions vainly paid in ransom for the life of Atahualpa, were accumulated from the unskillful washings of the Indians of Puno.

ames 16° 25' S., on the east margin of Lake Titicaca, are mentioned in Vol. I, *Mercurio Peruano*, p. 201, 1791. Antonio Ulloa, who wrote in 1772, says the Peruvian Indians had neither tools of iron or steel, but we know they had tools made of copper and tin. Tunnels, aqueducts of Lucanos, Nasca, Lupe, Condesuyos, &c., and all through the country remains of well-constructed roads.

In Cuzco the church of Santo Domingo is built on part of the ruins of the temple of the sun, dedicated to Pachacamak; Pacha, the universe or globe we inhabit—*Camak*, "creator or preserver, the eternal animator, the sun or soul of the universe," sometimes translated, "He who created the world out of nothing." The great temple of the sun, with a palace and a fortress, formed a mass of architecture of more than half a league, whilst its height appears to have been no more than twelve feet.

The principal ruins in Cuzco are the following:—Sacsahuaman is a fortress said to have taken fifty years to build. It "is on a lofty hill to the north of the city: many parts of the walls are still in perfect preservation. They are built of stones of extraordinary magnitude, of polyangular or cyclopean shapes, seldom fewer than from six to nine angles, sometimes more, placed one upon another, without any cement, but fitted with such nicety as not to admit the insertion of a needle between them. It is surprising, and still unexplained, how and by what machinery the Peruvians could have conveyed and raised these enormous masses to such heights; and it is equally extraordinary how the diversified angles of the blocks could have been fitted with such precision."—*Miller's Memoirs*, II. 224.

Colcampata, palace of 1st Inca, Manco Capac.

Palace of the Inca Roca,

Ab-Uahuan, residence of the virgins of the sun.

Palaces of the Incas Yupanki and Huasca.

Incarial ruins within the convent of Santa Theresa, and monastery of San Francisco.

Cyclopean construction in the street of the Marquez.

Yntipampa, place or plaza of the sun.

House of Garcilasso the historian.

Gardens of the temple of the sun, the Coricancha or plaza of gold.

The following summary on the subject of Peruvian monuments is by my friend, Mr. John Miller, who has kindly allowed me to transcribe from an intended third edition of his brother's Memoirs.

On the landing of Pizarro, the Peruvians were found to have attained a high degree of civilization, much higher, indeed, than any other nation prior to the use of graphic records; and that they were a great and ingenious people is clear from the vestiges of their mighty undertakings, which, as to usefulness, magnitude, and durability, compete with the works of Egypt, Greece, and Rome.

The coast and inland roads from Cuzco to Quito, each above 500 leagues in length; the causeway which runs through the morass of Anta; the extensive fortress or Zagsahuaman, with the underground communications with the city of Cuzco; the castles of Ollantaitambo; the ruins of numerous Pucaras or frontier fortresses, generally built on hills, surrounded by moats and strengthened by parapets of stone, and the outward moat of Pambamarca is upwards of four miles in extent; the palaces of Huanuco, Tumipampa, Pomallacta, Pachacamac, Cajamarca, the superb ruins of Cayambe and Tia-Huanacu (some of the ruins at this last-mentioned place I have mentioned as of an age prior to that of the Incas), some built of unhewn blocks, or rather detached fragments of granite, carried from great distances and elevations difficult of access; the winter palaces, gardens, fountains, and baths of Urubamba; the hot baths and palace of Huamalies; the quarry of Chinchero, shaped into a quadrangular theatre, the seats of which are decorated with animals chiselled in alto-relievo out of solid rock; the circular monuments or mausolean towers of massive stones of Celostani near Puno; the osier bridge of Huachacaca across the Apurimac; the balsa or pontoon bridge of the Desaguadero, and many other bridges of curious construction; the black rock quay, a mile long, on each side of the Guatany; the subterranean aqueducts of Nazca; and many other edifices, furnish, whether in ruins or converted by the Spaniards into

barracks or monkish establishments, evidences of the taste, power, and opulence of the Incas, and of the vastness of the population.

Among the changes to be deplored are the unfed canals, whose branching conduits once gave fertility to parched lands; mountain declivities, formerly adorned with andenes or fruitful gardens; and granaries, now empty vaults like those of Cajamarca; the mouldering ruins of numerous fishing villages on the coast; the Positos, or lands recovered from the desert, being excavations formed by the scooping out of the coating of sand, until the arable substratum is laid bare for cultivation.

The monuments which in Cuzco alone survive the destructive barbarity of its conquerors, attest, more strongly than the concurring accounts of early Spanish authors, the civilization of the people by whom they were erected.

We will now turn to the south part of Peru. I have no doubt that the Aymará Indians at present in the province of Tarapaca are descended from those who lived there previous to and in the times of the Incas. Almagro's troops, on their return from his discovery of Chile in 1537, came along the eastern margin of the desert of Atacama, when South Peru was discovered, and when some of his followers remained behind in the less arid localities of Pica, Tarapaca, and Camiña, which contained Indian populations under Aymará Curacas, or chiefs, named Sanga, Opo, Chuquichumbi, Ayvire, Tancari, &c., which names are to be met with amongst them at the present day.

From what I have already stated, it will be seen that the language spoken by the first Incas is lost: there is a probability, however, that it may have been one of the languages of the Aymará nations. It is only under the Vth Inca that the Aymarás and Quichuas were conquered; and it was the XIIth Inca who "tried his utmost so that the Quichua should be the only language spoken. He did not succeed, without the other barbarous idioms should be abolished." The Quichua was spoken in all its purity at Cuzco.

In our own times the Quichua and Aymará nations are the principal ones known in the inhabited parts of Peru. The Indians of Atacama appear to be distinct from the two already mentioned, and the Changos or fishermen found between Cobija and Copiapo are rather a mixed breed, and do not, I think, constitute a separate tribe, as is sometimes stated.

In the beginning of 1828, I was at the port of Cobija, 22° 28', on my way along the coast of the desert of Atacama to Chile. At Cobija were a few half Indian or Chango fishermen. I left Cobija in an open boat bound to the south for Paposo, sailing during the day, rowing at night, along a most wretched, sterile, and mountainous coast. On the ninth day we saw three fishermen on shore; they spoke Spanish. On the following day three came off to us on a seal-skin balsa out of the Caleta de Cardon, exchanging with us their dried fish (congreo) for flour and coca. When they heard we had coca, they exclaimed, "O que cosa tan rica y bendita,"—"Oh! how good and blessed is coca." On the twelfth day three more came off in balsas from El Rincon, and on that day we anchored in Paposo, where there are three or four families, people from Copiapo, who are here to barter for dried fish with the fishermen, who speak Spanish, and may understand the Atacama and Aymará languages.

Two leagues south of Paposo is Punta Grande, where there are three or four families, and five leagues further south is Agua Dulce, where there are half a dozen families, who have a few goats and asses. Having traversed the dangerous Mal Paso, I came to HUESO PARADO, in about 25° 30' (this spot was shewn to me as the divisional point between Peru, or rather Bolivia, and Chile). Nearing the valley of Copiapo is Salinas, where I found four or five families, and the fishermen, who had been supplied with wine, were dancing and singing all night. It was a sort of "wake," in consequence of the death of two children, the bodies of whom were about being taken to Copiapo for burial: thus perhaps these Indians may be called christianized.

These fishermen move from one caleta (cove) to another; they told me that they belonged to the district of Copiapo, but paid no tribute. They go occasionally with asses laden

with dried fish (charquicillo) across the desert to San Pedro de Atacama, and perhaps further in that direction, also to Copiapo.

At Copiapo, these fishermen of the coast are known as "Changos," but I did not hear it mentioned that they were a distinct tribe of Indians, and I looked upon the term "Chango" as something to do with their miserable condition and occupation, rather than their name as a tribe. I saw about 100, and allowing 50 fishing north of Cobija, and 100 more travelling in the interior, would make in all about 250 souls.

Acosta speaks of a nation of "Changos" ninety miles from Cuzco. In 12° 20' S., in the interior of Peru, there is a spot called Changos. The Quichua and Aymará are the principal Indian languages spoken in Peru. The Aymará was and is that known the best in the south, and spoken by the Indians of Tarapaca. There is a dialect called the Chinchisuya spoken more to the north.

These originally oral languages were learnt by the Spaniards, and made by them to follow the Greek and Latin construction, having similar declensions and terminations.

The following may not be deemed uninteresting to philologists. It is from the Spanish preface to the Gospel of St. Luke, translated into Aymará by the late Don V. Pazos, Doctor of the University of Cuzco.—Moyes, Took's Court, Chancery Lane, 1829.

The Aymará language has a labial, dental, and guttural pronunciation peculiar to it. The first is designated as *pp*, being pronounced by emitting the respiration with force against the lips united as *ppia*, a hole; *ppampaña*, to bury. The second with *tt*, is done by the tongue being placed against the teeth, as *ttanta*, head, but which, if pronounced with force, would mean something knavish. The third, *ck* or *k*, are pronounced in the throat, with this difference, that the first is more guttural, as *choka*, tree; *kollke*, money. The *w* has been introduced, because the Spanish *v* and *u* do not give the sound of *w*, but which in Aymará is the same as in English: thus, *acawa*, this; *acanwa*, here. The other letters have the same value and sound as those in Spanish.

The Aymará Indian is of a brown olive colour, but darker

in the Andes, has straight black hair, sparsely made, and may be called a small race of people. The whole population of the province of Tarapaca is about 10,000, of which 6000 are Indians. The province is divided into four curatos, viz. Tarapaca, Pica, Sibaya, and Camiña.

La Paz, N.N.E. of Tarapaca, is in about the centre of the Aymará country (which anciently included, among others, the following nations :—Canchis, Canas, Collas, Collaguas, Lupacas, Pacases, Carancas, and Charcas).

The only legend I met with in Tarapaca was the following :—Two Curacas, the brave and generous Tata* Jachura and the sullen and savage Tata Savaya, were in love with an Indian maiden, Marna Huanapa. She gave the preference to Jachura, upon which Savaya dared his rival to mortal combat ; but in which Savaya fell, when his head was severed from his body. The Indians say that Pacha-cawak immediately reared three mountains to perpetuate the occurrence ; one called Huanapa, which looks as if tresses of hair were hanging about it (probably old lava streams). Jachura is a very conical mountain, 17,000 feet above the sea, to the summit of which I ascended ; Savaya mountain having its upper part cut off, is probably a volcanic mountain, its cone having fallen in.

There is reason to believe, that although the Incas had carried their conquering arms beyond Quito, the Peruvians knew little or nothing of countries much beyond the Equator. The celebrated quippos, or knotted coloured strings, serving the Peruvians the purpose of writing, are but little used now in Peru. The natives of Anahuac, before they used hieroglyphical paintings, had quippos. Such were found among the Canadians, and used in very remote times by the Chinese, as Humboldt tells us. The quippos were known to the Puncays of Quito, according to Stevenson, who also saw a species of quippo in use in Arauco.

* It is said that *mama* is the Indian word for "mother," and *tata* or *taita*, "father :—" these expressions appear to me to be of Spanish origin. In some Quichua grammars, "mother" is put down as *mamay*, but "father," *taya* or *tayay*. In Aymará, "mother" is *taica*, and "father," *haki*.

The ancient Peruvians used strings of the pods of capsicum and leaves of the coca in lieu of a monetary medium.

The Indian of Tarapaca is quiet and inoffensive: his only arm is the sling, with which he hunts the huanaco, vicuna, and biscacha. He has been taught but very imperfectly the Christianity of Romanism, and the priests, aided by the secular arm, have great power over the Indian. Occasionally the priests get up a miracle; and not many years since "our lady of Guadaloupe," or the Virgin Mary, was made to appear to an Indian woman, or she was induced to believe so, near to the volcano of Isluga, when great ceremonies were performed, a large cross erected on the spot, and the place has become one of great veneration. The Indians marry at an early age. They are slow, but persevering; and whilst the men convey the produce of their land into the Creole towns, the females left at home assist in the cultivation, and tend the llamas and alpacas. The Indians present beasts of burden are the mule and ass: formerly they used the llamas and alpacas. The dog is the faithful companion of the Indian, particularly when travelling; is generally of a black colour, good size, long head and nose, and its bark is that of a sharp howl.*

The Indians, when at home in their villages, live well, having llama meat, poultry, fruit, and vegetables: some have wheat flour, but the chief grain is maize (first known by the name of "mahiz" in Hayti), of which there appears to be five varieties in Peru: their bread is made from it, as also, by fermenting the grain, their favourite drink, chicha, the merits of which is often celebrated in song: a verse of one runs thus—

O! most savoury nectar,
Thou golden coloured stream,
The Indian's joyous treasure,
O! let us freely quaff.

Chicha de maiz is like sweet-wort, made also from barley

* The Inca Pacha-cutec, when he conquered the Indians of Huancuya and Jauja, found that the dog was the object of adoration. The Peruvian dog is called in Quichua, "runa-alleo:" this is the *canis inga*, and a barking species. There are some fine black ones in Tarapaca, and for-

and white millet ; the red millet is better, and used medicinally (*quinoa a chenopodium*).

With a little toasted maize, water in a gourd, and some *cuca* or *coca*,* they will travel for days over the most desert tracks. The *coca* leaves are masticated with *mambi* or *uncta*, which is composed of an alkaline ash, principally of the cactus and quinoa, and sometimes mixed with boiled potato. Deleterious effects are said to be produced upon the coquero or confirmed masticator ; and the chewing to *acullicar* gives them an ugly appearance, the cheeks being stuffed out with it, the mouth, lips, teeth of a dirty green colour, and the breath very unpleasant.

The Indian habitations are built of rough stone and thatched with grass, of seldom more than one apartment, without windows, the fireplace in the centre, the smoke going out at the top. Their cooking utensils consist of a few earthen pots and dishes ; they manufacture, by spinning and rough weaving, the material for their clothing from the wool of the llama, alpaca, and sheep, and also from cotton ; their present fashion of dress being a mixture of Indian and Spanish. The men are never without the poncho or mantle ; that worn by the women is called the *lliella* : their carpets are termed *chuces* : *topos*, or ornamented pins of a large size, of gold or silver, serve to fasten the *lliella*, and sometimes one end is made into a spoon.

On the rivers in the north, and lakes in the interior, balsas or floats—*huampu* in Quichua—made of wood or rushes, are

merly, the Aymará Indians destroyed those who were not of this colour. There is another known as the *canis caribicus*, which is described as hairless and without voice. In Mexico, the *techichi* “was the only dumb dog.” Tschudi thinks that the *canis familiaris* was indigenous to Peru, and not introduced by the Spaniards.

* *Erythroxylon Peruvianum*—The tree of hunger and thirst. The leaves are picked in May and November, and sometimes thrice a year, dried in the sun, tied up in bundles of 22lb. each, pressed, steeped in ley, and then are ready for sale. The bundle is worth about 2*l*. The annual sales at La Paz are about one million sterling. This plant was esteemed in the time of the Incas more than gold or silver, and was burnt in their solemn sacrifices. The Xequés or priests of Bogota perfumed their idols with burning *coca*.

used ; but on the south coast, where the surf is heavy, the Indian fisherman uses a balsa made of seal-skins inflated, the manufacture of which shews great ingenuity.

Those Indians who hold a little land pay a tribute equal to 1*l.* per annum ; others who have no land, but in expectation of having it when a vacancy occurs, pay sixteen shillings. They reside from the coast to great elevations in the Andes ; indeed, the town of Isluga, at the foot of the active volcano of the same name, is about 14,000 feet above the sea. The llama is bred here, and a little millet grown : during summer pastures are found even higher than 15,000 feet. Here the condor is met with, which often destroys young domestic animals. The puma, or maneless lion, and ostrich are seen at these great elevations.

Occasionally a few Yungeños, also called Chirihuanos, visit South Peru. They are known as the travelling doctors, in consequence of having an ambulatory pharmacy, containing remedies for every disease, real or imaginary, viz. herbs, gums, resins, roots, ointments, carimunachis, and piri-piris, or love charms of various sorts, including loadstone ; but the only useful medicine is the quina, or cinchona bark, taken for fevers, which appear in the autumn in the valleys of the coast, where there may be water and vegetation. At Pica, which is about 3800 feet above the sea, it is very bad at times, but at 2000 or 3000 feet higher it is not known. The Chirihuano sometimes bleeds, the operation being performed by a rude lancet, composed of a sharp piece of obsidian, or glass, fixed into a piece of wood, placing the sharp edge on the vein, and then giving it a nick with the thumb and finger.

Mr. Blake, in his notice of Tarapaca, (*American Journal of Science*, 1843,) says, that " a mile or two from Tara is an ancient country, unlike those near Arica and other parts of Peru, the bodies have for the most part crumbled to dust. They are buried in a sitting position, with the arms across the breast, and wrapped in cloths of woollen, some of which are fine and richly coloured. As in the burial-place of Arica, many of the skulls found here are elongated, full two-thirds of the cerebral mass being behind the occipital foramen."

During my residence in South Peru, particularly at Arica and Tarapaca, I opened many huacas, and although a few of the skulls appeared somewhat elongated, the greater number were not so; and when skulls are met with of peculiarly elongated form, it may be attributed to the effect of artificial means, as such was a common practice among the Peruvian Indians, even as late as the sixteenth century. Condamine says that the term "Omaguas," in the language of Peru, as that of "Camberas" in that of Brazil, means "flat heads." This flattening is effected by pressing between two plates the forehead of the newly-born child, in order to make them resemble in shape the full moon. Such was prohibited by the Spanish ecclesiastical councils in 1585, by a synod held at Lima, when a decree was passed against the Indian practice of disfiguring the head. This practice has, in all probability, given rise to the opinion entertained by some, that the compressed skulls found about the Lake of Titicaca were naturally of this form, and not produced by artificial means.

Mr. Blake also mentions, that on the summit of a conical hill near Tara are two large circles, one within the other, formed by large blocks of stones, evidently carried there from a distant part of the valley beneath, and, if without the aid of machinery, at an immense expenditure of labour. Similar circles of stone, like those erected by the ancient Celtæ, are not uncommon in Peru and Bolivia.

In various parts of the province of Tarapaca, on the coast, as well as in the interior, huacas—sacred places, (*aye-huaci*, "houses of the dead, or ancient Indian cemeteries,") are found, and, with the mummies, images of gold and silver, curiously shaped pottery, paintings, arms, tools, fishing implements, mirrors of silver and polished stone, hatchets of copper, dried fruits, maize, shells, fossil bones of animals, &c. &c. It is said that the dead were preserved by embalming and keeping them in tombs in the frozen regions of the Andes. One form of this ancient pottery is that of a double bottle, and, when liquid is poured from it, a whistling noise is heard: such sounds are said to have been used for calling the Indian from his labour in the field. These are known as the musical jugs of the Incas, and afford evidence of a degree of perfection in the

manufacture and design of pottery which the present race do not possess.

As the district of Tarapaca and surrounding country is so dry and desert, and its surface charged with so much saline materials, dead bodies have been naturally preserved for centuries in various parts.

Dr. Reid,* a traveller, in his journey, in 1850, from Cobija (the port of Bolivia) into the interior, dates his observations from the old Peruvian frontier fortress of Lasana, which is on the skirts of the desert of Atacama, and not far from Chuic-Chuic. He says, "There is an extensive half-moon: in it sit men, women, and children, from five to six hundred, all in the same attitude, and gazing vacantly before them, some fallen down, and some partly covered with sand. The common opinion is, that they were buried in this place: mine is, that they buried themselves, for there is no place in the vicinity where they could have dwelt. Many women are among them, with infants at the breast. The similar attitude of them all, and the expression of grief which is still discoverable in most of their countenances, prove that they had withdrawn hither in despair when the Spaniards conquered and devastated their land. They had the belief that if they died they would be removed to a better world towards the west; on which account their cooking utensils, found beside them, are full of maize. The whole scene produces a deep and melancholy impression." Two of these bodies were sent to Ratisbon. The facts given by Dr. Reid are interesting; but his opinion that they had gone there to die, so as to escape the conquering Spaniard, is scarcely probable, but rather that the locality is a huaca, or ancient Indian burial-place. Near this are deposits of the Atacama meteoric iron, that at Toconao is in $23^{\circ} 20' \text{ S. } 68^{\circ} 10' \text{ W.}$

South of the silver mines of Santa Rosa (not far inland from the port of Iquique), is a curious spot known as Las Rayas: the sides of one of the barren hills in particular is laid out as if for a garden, with a large double circle in the

* Chambers' Edin. Journal, March 8, 1851.

centre, and paths branching off dividing the ground into compartments. The loose stones having been carefully picked off the paths, which are rendered hard apparently by the feet of people, it is supposed that Indian rites and ceremonies were, and may still be, performed here. In the vicinity is the representation of a llama, produced by taking away the loose dark stones from the side of the mountain inside the outline: these representations are called "*Pintados de los Indios*," or Indian pictography, and may be seen from a long distance. South of La Nueva Noria, where the crude native nitrate of soda is dug and refined, is a range of hills known as Los *Pintados*, from the numerous figures of llamas, squares, circles, and other forms which are found covering their sides for the space of a league. This is the largest collection of "*pintados*" in Tarapaca. The opinion is, that the formation of them was known to the "*Indios Gentiles*," or Indians, before the conquest. In the Quebrada de los *Pintados*, or the pictured valley, many leagues S. E. of the last mentioned, I examined representations of Indians, male and female, llamas, dogs, and other curious forms, on the side of the desert ravine; some of the figures being 20 to 30 feet high, cut in the sandy marl, the lines being 12 to 18 inches broad, and 6 to 8 deep. I then thought (1826) these delineations were made by the Indians for amusement, but now think their existence may be attributed to some other motive, perhaps to mark the vicinity of their burial-places. Indian pictography, symbolic and representative devices, is common to the tribes of the New World. In North America they are cut in rocks, trees, or painted on skins.

At the passes in the Andes of Pacheta* and Pichuta, above Camiña, the Indian who goes by there will bring a stone, even from a distance, in order to add another to the pile: these piles of stones are not uncommon in the Andes and other parts of S. America.

* From "*Apachitas*," or "*Cotararayrumi*" (*Quichua*) and were adored as gods. The Indian who had surmounted a difficult hill, and arrived at the pass, was thankful to *Pacha-camak*, and cried out, "*Apachecta*," or "To him who has given me strength."

The ancient Indians worked mines of gold, silver, and other metals. These mining operations probably prepared them for other works of engineering skill. Their aqueducts are great works, as may be seen at Pica, in the province of Tarapaca, where there are socabones, or tunnels, of three thousand yards in length, driven through sandstone mountains to convey water for irrigation, for which they are still used. These tunnels are 4 feet wide and 6 feet high: at every 100 yards is a lumbrera, or ventilating shaft, as in our own railway tunnels. The water so conveyed is collected into cochas, or reservoirs, from which it is distributed to the chacras, or farms and vineyards.

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ON THE
RECENT PROGRESS OF ETHNOLOGY;
BEING
THE ANNUAL DISCOURSE FOR 1852.

Read before the Ethnological Society, at the Annual Meeting, on 14th May
1852. By RICHARD CULL, Esq., Honorary Secretary.

WE may congratulate ourselves on the continued and increasing interest which the educated classes of society are taking in ethnological knowledge. It is now practically admitted that the science of Ethnology is worthy of being cultivated. It is true that its claims have been tardily admitted; but we must remember that, in commercial countries, a science which does not promise to be pecuniarily profitable, has not those attractions which ensure the devoted attention of crowds of students.

The desire of the public for systematic knowledge of our science is evinced by the steady demand for the standard works on Ethnology, by the publication of so many new ones, by the popularity of lectures on the subject, and by the frequent introduction of Ethnology as a topic of conversation in general society.

Considerable attention was drawn to our science during the last year by the appearance of so many foreigners in London, who came to visit the Great Exhibition. And to witness the many varieties of man, assembled from every region of the earth, in the Crystal Palace, calmly studying the productions of each other, was not the least of the wonders of that fairy-like creation, whose physical existence is now about to pass away from us.

The differentia, both physical and non-physical, in the varieties of man, are so patent to observation, as not only to attract attention, but to rivet it, and absorb it. Some students, indeed, are unable to advance beyond the study of these differences. They constitute, however, only the threshold of our temple. Resemblances must also be studied. This tendency of the mind to fix itself on the differences in the

varieties of man may be called the student's bias of mind. We occasionally find this bias of mind remaining in after life, and manifesting itself in over-estimating the value of those differences in relation to the resemblances.

Ethnology is a science of yesterday. Daubenton's observations on the situation of the foramen ovale, and Campers' on the facial angle, were the result of researches to discover a physical index to the mental capacity. In 1790 Blumenbach published his *Anatomical Description of Ten Skulls*, in order to shew how certain varieties of man differ from each other in cranial form. In 1820 Blumenbach completed his work, having altogether described sixty-five skulls.

In 1791 Dr. Gall published the first part of an extensive work, in which we see the spirit in which his researches into the moral and intellectual nature of man were conducted. The great and fundamental principle was the comparison of cerebral form with the manifestation of mental qualities. In 1796 Dr. Gall began to lecture at Vienna; and in 1798 we find him complaining, in a letter to his friend, Baron Retzer, that he was called a craniologist. "The proper object of my researches is the brain. The cranium is only a faithful cast of the external surface, and is consequently but a minor part of the principal object." In this letter he speaks of national heads in relation to national character. And to Dr. Gall and his disciples we are most indebted for collecting crania, casts of crania, and casts of heads of the several varieties of man.

Ethnologists have much yet to do in collecting crania from various countries, and still more to do in ascertaining the relationship of these crania to each other, both in time and space. The mere geography of certain forms of cranium is but the first step of a great inquiry. We seek to know if one form of cranium passes into another. If so, under what circumstances, both physical and non-physical, does a mutation of form take place? Our Society might perhaps, with advantage, draw attention to those ethnological questions which require solution to enable us to advance to higher generalizations.

The literature of Ethnology, like that of other sciences,

may be conveniently considered under two general heads, viz. as that which

1. Advances Ethnology; and
2. Diffuses a knowledge of Ethnology.

It is quite true that a work written to advance the science, does also, to a certain extent, diffuse a knowledge of the science; but a work that is written to teach the science does not necessarily advance it, and hence the distinction. During the past year, works have been written with both these objects in view. I proceed briefly to notice them.

Three works on Ethnology from the pen of one of our Fellows, Dr. Latham, have appeared since last May. "The Ethnology of the British Colonies and Dependencies" is a small work, which represents a course of lectures which Dr. Latham delivered at the Royal Institution, Manchester, during February and March 1851. "Man and his Migrations" is another small work, and which also represents a course of lectures which the author delivered at the Mechanics' Institution, Liverpool, in March 1851. These works being devoted to the teaching of what is known, *i.e.* to the diffusion of Ethnological knowledge, require no further notice on this occasion.

Dr. Latham's edition of the *Germania* of Tacitus, with Ethnological dissertations, is a valuable contribution to our science. The object of the work is to exhibit in detail the Ethnology of ancient Germany. The means of effecting this object is the study of the different languages of the families and nations descended from and allied to the Germans of Tacitus. We all know the difficulty of reconciling the Ethnology of Germany at different epochs in the historic period with the *Germania* of Tacitus. The question, as Dr. Latham notices, is not whether certain nations of the *Germaniæ* are rightly placed therein, but whether Tacitus' test of Germanism was the same as ours; and whether, if different, more correct.

We know that nearly the whole of that part of the *Germania* of Tacitus east of the Elbe, as well as certain parts west of the Elbe, were, at the beginning of the proper historical period, *i.e.* in the reign of Charlemagne, not Germanic

but Slavonic. Did Tacitus confound Slavonians with Germans? Did the German population of Tacitus entirely abandon that tract of country, and a Slavonian population take its place? These are questions which Dr. Latham has treated in detail with great ability. The country east of the Elbe was only dimly sketched by Tacitus. The period when it became known in detail, and from personal knowledge, is the reign of Charlemagne. Accurate geographical knowledge of this reign was scarcely possible to Tacitus.

It is not enough, as Dr. Latham remarks, to know how a modern writer classifies the varieties of man. The reader of Tacitus must also know the view that the ancients took of those varieties. The ancients had clear notions of the differences between the group to which they themselves belonged, *i.e.* the Classical group, and the groups to which the so-called *βαρβαροι* belonged. This notion, clear as it was, was limited to one direction. It comprehended only the points of difference. Modern science has extended the notion to comprehend points of resemblance also. The resemblances which brought the Slavonians and Goths into the same group with the Classical stock—the great group called Indo-European, were utterly unknown to the ancients.

“The Unity of the Human Races proved to be the Doctrine of Scripture, Reason, and Science. By Thomas Smyth, D.D.”

This work, which appeared in Edinburgh late last autumn, is a reprint, revised and much enlarged by the author, of the American edition. The American edition grew out of three discourses, and various articles by the same author, which appeared in several Theological Journals in the United States, and which were written to controvert the position of Professor Agassiz, that the origin of the human race is multiform. Professor Agassiz is well known as a profound naturalist, whose opinions are entitled to much respect. As a naturalist, the Professor declares there is no common or several centres of origin for the lower animals, but that they were all created in the localities which they naturally occupy, and in which they breed, either in pairs or multitudes. The same is asserted of man. There is no common central origin

for man, but an indefinite number of separate creations from which the races of man have sprung. The Professor fortifies this opinion by an appeal to the Holy Scriptures. He says the Biblical history of the creation of man is that of only one race, viz. that of Adam ; and that Adam and Eve were not the only pair created, nor even the first created of human beings.

Professor Agassiz thinks there was a distinct origin and separate creation for each race, and that each creation took place in that locality which the race naturally occupies.

On these views Dr. Smyth joins issue ; and, in some very able and controversial writings and lectures, has strenuously argued for the unity of the human race. Those controversial works have formed the basis of a systematic work, in which he labours to shew, that scripture, reason, and science concur in proving the unity of the human race. Dr. Smyth's eloquent and forcible book partakes in some degree of the controversial spirit, but even with that drawback it is well worthy the attention of ethnologists.

Dr. Smyth devotes three chapters to the statement of the Historical and Doctrinal Evidence of Scripture on the unity of the human race. " This doctrine, be it observed, Scripture teaches us, not as a matter of scientific knowledge, but as the foundation of all human obligation, and of the *universality* of all human charity."—(P. 112.) But as regards ethnological details, " the tenth and eleventh chapters of Genesis are unquestionably the best ethnographical document on the face of the earth."—(P. 100.) The importance of the doctrine to Christianity cannot be overrated ; for " it will be at once perceived that the gospel must stand or fall with the doctrine of the unity of the human races."—(P. 112.)

With so high an estimate of the importance of this doctrine to our highest interests, we are prepared for the urgency with which it is advocated. As a theologian, Dr. Smyth places in the front rank his Scripture evidence. " The truth and certainty of the unity of the human races has now, we believe, been established as an incontrovertible fact. It rests upon the unmistakeable evidence of the infallible Word of God, who, in the beginning, made of one blood all the nations

of men to dwell on all the face of the earth." But without bating a jot of the value of his theological argument, Dr. Smyth boldly enters the ethnological arena, fully convinced that ethnological conclusions must be drawn from ethnological data; and, accordingly, he discusses the question "of the nature and philosophy of species," and then ably argues that, "the unity of the races is proved by the unity of the species;" that "the unity of races is proved by their common fertility, and by the infertility of hybrids;" and then grappling with the philological argument that "the unity of the races is proved from the universality, nature, and connection of languages."

Dr. Smyth then quits the scientific data and reasoning, to call in the aid of history and tradition; and thence he appeals to experience, and the insensible graduations of the varieties, as arguments for the unity of the races of men. Dr. Smyth does not evade the difficulties which surround his view of the question. Professor Agassiz, and other mere naturalists, lay great stress upon the fixedness of the physical characters of the several varieties of man, that these characters have been fixed certainly from the earliest dawn of history; whence it is argued that the races of men have *always* been separated by the same amount of differences. Dr. Smyth fairly states the argument of the Professor, and devotes a chapter to the "Origin of the varieties of the Human Species," and this chapter is well worthy of attention. Amongst the interesting portions of the book is an appendix, "On the former Civilization of Black Races of Men;" and a note "On the Veddahs of Ceylon."

In several respects Dr. Smyth's is a remarkable and valuable work. It may be considered as a contribution to the bibliography of our science. It is a compendium of all that has been written on that side of the question. His authorities are duly cited, without any parade of learning, without egotism, without any assumptions of superior sanctity; and with strict impartiality does he state his opponent's views. There is with all this so much originality and deep interest in the subject, that the reader is carried along, without at all thinking of the author himself.

Our associate, Mr. Logan's, *Journal of the Indian Archipelago and Eastern Asia* continues to record most important information of the Malay and other peoples of that archipelago. The history, antiquities, languages, and ethnology of the Malays is gradually being brought to European knowledge by Mr. Logan, and his band of contributors living at and around Singapore, who are so praiseworthily labouring for science in that distant region.

Mr. Logan's extensive knowledge of Malay dialects gives a peculiar value to his philological researches; and his intimate knowledge of the physical, intellectual, and moral character of the Malays give him great vantage-ground in his ethnological researches of the Indo-Pacific Islands. The ethnology of the central Malay nations is now becoming more distinct, and is assuming a more definite outline, which will clear the way to a fuller appreciation of the facts connected with the outlying tribes and offshoots which are so widely scattered over the islands of the Pacific. I commend to your especial attention Mr. Logan's researches, which you will find recorded in the 4th and 5th volumes of his *Journal of the Eastern Archipelago*.

Captain Denham is now about to sail with an expedition which is placed under his command to make a survey of certain groups of islands on the east of Australia. We may therefore expect new and valuable details of the Ethnology of that region.

I think the time has now arrived when a report on the Ethnology of the Pacific Islands might be drawn up, by which means special attention would be drawn to the nature and amount of our ignorance of the details of that Ethnology.

We all regretted the early death of Captain Owen Stanley, who died in command of the "Rattlesnake," while on her surveying voyage. Mr. Macgillivray, the naturalist to the expedition, has written an account of the scientific results of the voyage. Very important knowledge has been collected in various departments of science. Amongst others, some valuable contributions have been made to Ethnology. The survey of Torres' Straits was important in a commercial and maritime point of view. The Ethnology of this district, including both

sides of the Straits, Timor, &c., is most important in relation to the great questions of the route of migration of the Malays to people the islands of the Pacific, and that of the black race (Papuan?) to people North Australia. Materials are now fast collecting, which will, it is hoped, ere long enable us to form some connected view of the Ethnology of this region.

“Steene Bille’s Bericht der Reise der Galathea um die Welt.”

This book is an account of a voyage of discovery round the world of the “Galathea,” a Danish corvette, commanded by Captain Bille.

The great object of the expedition was to obtain more accurate and positive knowledge of the Nicobar Islands, a Danish Colony in the Bay of Bengal, with a view to that Government’s decision as to the expediency of retaining the colony. The “Galathea” proceeded by the Cape of Good Hope to Madras, Calcutta, and these islands. Thence she passed through the Straits of Malacca, to Batavia, the Philippines, China, the South-Sea Islands, and home by Cape Horn.

The Danish edition is in three volumes; the German, by omission of an appendix and other curtailing, is compressed into two volumes. I have only seen the German edition. The voyage occupied two years, from 1845 to 1847, and the delay of publication was caused by the political events which have so much agitated Europe for the last four years. The chief value to us is the very complete account of the Ethnology of the Nicobar Islands. The appendix contains vocabularies of the Nicobar and Negrito languages, which I regret are not in the German edition, and the scientific (ethnological) part has evidently been abridged also. This I regret; for while German is generally read, we find but few who read Danish.

We are indebted to another of our fellows, Dr. Daniell, for gathering important details of the Ethnology of Western Africa. Dr. Daniell has resided for several years on the Guinea Coast, where he has laboured for the advancement of several sciences. His paper on the natives of Old Calabar, printed in our first volume, established his reputation as an ethnologist. His recent papers on Akkrah and Adampé will

sustain that reputation. He has filled up lacunæ in our knowledge of African Ethnology, and we may confidently look for more knowledge as the result of new investigations which he will enter upon on his return, at the end of the month, to Africa. And let me add, that he will have our best wishes for the preservation of his health, and that he may be spared to return to us, and to increase his reputation by enlarging still more the boundaries of our ethnological knowledge of West Africa.




We may also expect additions to our African ethnology from Dr. Overweg's expedition.

"A Manual of Geographical Science. By the Rev. C. G. Nicolay." The several articles of this manual are written by various authors. The article Physical Geography is written by Professor Ansted. The section on the distribution of animals in space and time occupies 48 pages; that on Ethnology occupies 25 pages; so that a very fair proportion of space is allotted to our science. But in so small a space there can only be a sketch of the subject. The sketch is a compilation, chiefly from the works of Dr. Prichard and Colonel Hamilton Smith; and, as might be expected, the sketch is more a description of the geographical distribution of the human family than a manual of Ethnology.

Our science has been advanced, and most valuable materials have been collected for others to advance it, by the Bible and the several Missionary Societies. The philological and other knowledge which those societies have collected together to further the high and noble objects which they have in view, has also been of incalculable value in advancing ethnological science. I need not enumerate the many unwritten languages which the missionaries have been the first to study and reduce to writing. Nor is it necessary to enlarge upon the great patience and ability which is required so to acquire, and afterwards to write, for the works themselves speak louder than any praise of mine. The labours of the missionaries have greatly contributed to advance the bounds of our knowledge in both glossology and grammar.

Colonel Rawlinson has read another memoir to the Royal Asiatic Society, on the Babylonian and Assyrian Inscriptions,

part of which, occupying about 150 pages, has recently been published in the Journal of that Society. The memoir is upon the Babylonian translation of the Great Behistun Inscription. The memoir consists of—1st, The text and an analysis of the Babylonian inscription at Behistun; 2d, An indiscriminate list of Babylonian and Assyrian characters; and, 3d, On the Babylonian alphabet, of which we have only the beginning now published.

It can be shewn, beyond all doubt, that a very large proportion of the Assyrian signs, *i. e.* the arrow-headed characters, are polyphones. “But although I can thus shew the probable reason of the employment of cuneatic polyphones—although I can explain the fact of the character , the ideograph for a ‘country,’ being invested with such discrepant phonetic values as *mat* and *kur*, by referring to the Semitic synonyms  in Chaldee, and  in Arab. (cognate with *χώρα*), the practical inconvenience of such a variableness of power is excessive. The meaning, for instance, of an Assyrian and Babylonian word may be ascertained determinately, either from the key of the trilingual inscriptions, or from its occurring in a great variety of passages with only one signification that is generally applicable; but unless its correspondent can be recognised in some Semitic tongue, it is often impossible, owing to the employment in it of a polyphone character, to fix its orthography. In the multitudinous inscriptions, again, of Nimroud, of Khursabad, of Koyunjik, and of Babylon, of which (although their general application can be detected without much difficulty) the details require for their elaboration a minute philological analysis, this orthographical uncertainty presses on the student with almost crushing severity. On the one side, in working out his readings, he can only employ philological aid,—that is, he can only compare Hebrew or Chaldee correspondents, after being assured of the true sound of the Assyrian and Babylonian word; while on the other, he must depend on his acquaintance with Semitic vocables to fix the fluctuating cuneiform powers.”

The recovery of a long-lost language like the Babylonian, is, of itself, a matter of deep interest, but the consequences

of that recovery, in enabling us to read the numerous inscriptions containing ancient records of Babylonian history, and enabling us also to trace the philological relationships of that language, are consequences of great interest and value to us as ethnologists. It appears that the Babylonian is a Semitic language, and that Biblical Hebrew and Chaldee are the two languages greatly used by Col. Rawlinson to illustrate it. I take this opportunity to refer you to a remarkable passage in the Divinity Lectures of the Rev. W. Digby, Dean of Clonfert. I quote from a copy printed in Dublin in 1787. In Lecture V. the Dean is engaged in shewing that the confusion at Babel was not of language in its ordinary sense, but about religion.

"That the whole earth was of one religion, and *that* the true one, immediately after the flood; when but eight persons were left alive, is not to be disputed. That there was also but one language then spoken, and that a variety of languages did not immediately take place upon the confusion at Babel, but was the slow, gradual, and natural effect of the dispersion, is fairly to be collected from the book of Scripture. Nay, more, that but one language was spoken for several ages after, will, I think, appear from the following circumstances.

"It is allowed on all hands that Canaan, the son of Ham, spoke the same language with Abraham, Isaac, and Jacob. It appears further, that Nimrod, who was grandson to Ham, spake the same language with Asher, the son of Shem; the former in Babylon, the latter in Nineveh."

The Dean carries on his argument to shew that one language only was spoken up to the time that Joseph was carried into Egypt. And he argues that this universal language was the Mosaic Hebrew. I have quoted the Dean, not to follow his argument in detail, upon which, on the present occasion, I pass no opinion, but to shew that some ground exists why we, as modern philologists, might have been justified in assuming, *à priori*, that should the Babylonian language be recovered, it would be found to be cognate with the Mosaic Hebrew.

It was proposed some years ago to appoint a distinct

Section for the cultivation of Ethnology in the British Association for the Advancement of Science. The proposal was negatived by the Committee of the Association. It was, however, felt that Ethnology is worthier than to occupy a mere subordinate place in the section of Natural History. It has accordingly been removed from that section, and now is united with Geography, which has been removed from Geology, and they together form one section. If by such a union Ethnology were to be degraded into the science of the geographical distribution of the human race, I should never cease to raise my voice against its union. At the Ipswich meeting, last July, Section E, for the cultivation of Geography and Ethnology, met for the first time, and you were duly informed of the results of that meeting at the opening of the session.

I have now rapidly glanced at the progress of Ethnology during the past year. In relation to the whole science, that progress is, fragmentary, but so is the annual progress of every other science. One of the chief uses of reviewing our progress is to draw attention to what is well known, less known, and unknown; for our knowledge and ignorance are so blended as to make a chaos. And in reviewing our position, it would be well to draw up special reports, in order to affix the boundaries of our knowledge, so as to exhibit in its full magnitude our ethnological ignorance, both in relation to space and time.

Common experience in the progress of knowledge shews, that in proportion as the number of students of a science increase, so does a larger number of persons become interested in the advancement of that science, and we find it advance. The history of Mathematics, of the Physical Sciences, of Chemistry, of Geology, of Geography, and other sciences, all concur in shewing that a rapid advancement of the science, both by extension of knowledge, and a fuller comprehension of the laws of nature, invariably follows a wider diffusion of what is already known. Such being a law of relation between the advancement and the diffusion of knowledge, I take the liberty of asking you to aid us in advancing Ethnology, by diffusing as widely as possible a knowledge of it amongst your friends,

and thus to awaken in them an interest in our pursuit. In this way, however small our knowledge may be, and however unable immediately to enter upon original researches ourselves, we may still indirectly conduce to the advancement of our science. And let us not hesitate to pursue our inquiries, lest they should land us in scepticism; for that which refuses to investigate in fear of such a result, is a scepticism of the worst kind, for it is a scepticism whose assumption is, that the words of God are at variance with His works, and will, therefore, continually place Religion and Science in antagonism. Let us remember, in the beautiful language of Spurzheim, that "genuine philosophy and genuine religion are very nearly akin. The one explores the elder volume of nature—the other investigates the later volume of Divine revelation. Both unite in their practical results; both promote the present improvement of man; both conduce to his ultimate felicity."

ON THE
ROMANISH LANGUAGES OF SWITZERLAND
AND THE TYROL.

By Dr. WILLIAM FREUND.

Read 9th June 1852.

THE great historical struggle in which the modern Germanic and the ancient Roman spirit have been engaged for centuries beneath the ruins of the old Roman empire, and which has affected politics, laws, morals, and literature alike, is nearly concluded in its general and more prominent features. Neither of these two intellectual tendencies has been absolutely victorious, or entirely conquered. Far up in the north the Roman spirit has impregnated the Germanic race; down in the south the German spirit has penetrated through the manners of the nations of Roman origin, to the great advancement of civilization, which rests on its securest and firmest basis in this intimate connection of the old classic and the Germanic spirit.

But as between neighbouring nations engaged in violent hostilities with each other, peace is with most difficulty and most tardily restored on the boundaries: this intellectual war between Romanism and Germanism, especially as regards the *languages* of the two races, continues down to the present time on the field where the two elements come in contact with each other—in the ancient *Raetia*, the modern *Grisons*, and the *Tyrol*. And it is of great interest to the historian and the ethnographer, as well as to the inquiring philologist, to watch the course of this struggle, which, though apparently noiseless, is not the less serious and passionate.

When, on a journey through Switzerland, we advance on the road which leads to the sources of the Rhine, from *Chur*, the chief town of the Grisons, to the village of the *Ems*, i. e. as far as from St. Paul's to Westminster Abbey, we are startled to hear, instead of the purest and correctest German we have just left, a popular language which is neither German, nor

Italian, nor French. The '*Bunn gi Signur*,' or '*Bunna sera Signur*,' with which they greet us, may be explained as bad Italian for '*Buon di*,' or '*Buona sera Signor*.' The comprehension of '*Lur Cumpagnia mi ven ad esser lagreiola*,' for 'Your company is very agreeable to me,' is more difficult; but the answer to our question for the right way: '*Els san buc ir anèrr*' (You can't mistake it), or the exclamation, '*Fou als gavish ün vantireivel viadi*' (I wish you a pleasant journey), will be quite incomprehensible. We go a little way further from the village of *Ems*, and hear good German again in the lovely *Reichenau*, famed by the fact that Louis Philippe taught here during his exile in 1793; but in the next village, *Bonaduz*, we have the unintelligible language again. We travel on: in the next village, *Rhoetzunz*, German is spoken; in the following one, *Kätzis*, the strange idiom prevails, and so it goes on along the whole route, as far as the *Splügen*, and the sources of the *Lower Rhine*, where both languages suddenly cease, and the Italian commences its dominion over the south.

If we travel eastward, from Chur to the *Fulier Pass* and the *Engadine*, we lose the German language entirely a few miles beyond Chur, near the village of Lenz. The strange popular idiom prevails uninterruptedly to the sources of the Inn, and then continues, slightly modified, but much more unintelligible, towards the east, through the long valley of the Inn to the boundaries of the Tyrol, where it is superseded by the German, but appears in a slightly changed form in single dispersed villages.

We cannot be surprised that the traveller, revelling in the varied and overwhelming impressions produced by the natural scenery, and charmed by the enchanting pictures of the Tyrol and Switzerland, should feel no inclination and find no leisure for philological or grammatical researches; and, on the other hand, it is just as natural that the simple inhabitants of those mountain villages, in their complete isolation from the intellectual life of the inhabitants of the valley, and knowing little more of literature than the Bible and hymn-book, can give no satisfactory explanation of the genius of their language. Hence it comes that we know far less of this highly interesting branch of the great Roman original tongue than of the language of

the Sandwich Islands or the Gipsies; that the greatest living professor of the Romanish languages, Dr. *Diez*, in Bonn, has completely slighted the value of this language; and that the most philological of all the nations of the world—the Germans—in their language esteem *Churwälsch* (the language of Chur or the Grisons) and *Kauderwelsch* (or gibberish, cant, jargon) to be synonymous terms.

The oldest information which we possess of the language of the inhabitants of the Grisons dates from the year 1664, being an account of a journey made through part of the low countries, Germany, Italy, and France, by *Philip Skippon*, Esq., and is copied in the sixth volume of *J. Churchill's* "Collection of Voyages and Travels," London, 1732, folio pp. 695—699. The traveller speaks as follows of this curious idiom:—

"Here [in the Engadine] all the inhabitants speak an odd language called *Romauntsh* (which is also spoken by the other Grisons), compounded of *high Dutch, Italian, Spanish, French*, and *their own idiom*: they have several dialects of it, and those in the lower speak differently from those in the upper Engadine. The New Testament and Psalms are printed in this language, which the ministers preach in."

The writer then gives the Lord's Prayer in two dialects, and adds, finally, a list of some hundred words, which, on account of the unscientific and inaccurate mode of writing them is of no value for linguistic purposes.

The next, and a more explicit account of the language of the Grisons in the year 1776, we owe to a native of that country, a member of the highly-respected ancient patrician family of *Planta*. The pamphlet is entitled, "An Account of the Romanish Language, by Joseph Planta, F.R.S., in a letter to Sir John Pringle, Bart., P.R.S.," and is reprinted from the *Phil. Trans.* 1776: vol. LXVI. part I. pp. 129—159. A German translation of this paper appeared simultaneously at Chur, under the title "*Geschichte der Romanischen Sprache, von F. Planta*." This essay has a particular interest, because it expresses the same views on the origin of the language which are still cherished with great national pride by many of the inhabitants, namely, that the present

idiom is the almost unchanged ancient language of the *Etrurians*, which they introduced into that region on their immigration from Italy in the fifth century B.C., and that this mountain dialect is therefore older and more original than all the other languages of southern Europe.

As this little pamphlet afforded no material for individual investigation and individual judgment, and as it was known to but very few, the learned world remained in complete ignorance of the language of the Grisons for nearly half a century, and this ignorance was not at all diminished by what Adelung said, in the beginning of this century, in "*Mithridates*," on the occasion of giving the Lord's Prayer in that idiom, on account of the inaccuracy and inconsistency of his assertions.

At last, in the year 1820, *Math. Conradi*, Protestant pastor at *Andeer*, a little village on the road from Chur to the Lower Rhine, published the first, and hitherto the only *German-Romanish Grammar*, which was succeeded in 1823 by a little *Romanish-German*, and in 1828, as a second part, by a *German-Romanish Dictionary*.

These three works have hitherto been considered as the chief sources for a knowledge of the language of the Grisons, and the matter they afford has been used with conscientious and scientific care by the German philologists, *Diefenbach* ("On the present Romanish written Languages," Leipz. 1831, 4to.); *Diez* ("Grammar of the Romanish Languages," Bonn, 1836—1844, 3 vols. 8vo.); and by *Fuchs* ("On the so-called Irregular Verbs in the Romanish Languages," Berlin, 1840, 8vo., and "The Romanish Languages in their relation to the Latin," Halle, 1849, 8vo.) As the result of their investigations it has been discovered that the language of the Grisons is by no means the ancient Etruscan, but, like the present languages of Italy, Spain, Portugal, France, and Wallachia, a branch of the *Latin tongue*. The abovenamed professors only differ in the degree of the relationship, as *Diefenbach* and *Fuchs* consider the language of the Grisons, or the *Rätoromanish*, as a *daughter* of the Latin, while *Diez* esteems it the *granddaughter* or *relative one degree removed*.

However meritorious and praiseworthy the works of *Conradi* are, they still reveal, when the subject is investigated in a

profoundly historical manner, besides other imperfections, a *partiality* which has naturally biassed the descriptions of the abovenamed scholars, which are founded on these works. The honest pastor of Andeer has treated the language prevalent in his immediate neighbourhood, that is, in the *Grey League*, grammatically and lexicographically, and only added to that, by way of appendix and without any further explanation, four little insignificant tales in the idiom of *Engadine*. But both geography and history direct the philologist with equally forcible reasons to the heights of the southern half of the Grisons, where the isolated population could keep the remnants of the Roman language much more free from Teutonic influences than the inhabitants of the northern portion, where the German tongue has encroached with giant strides for centuries, and has completely supplanted the former language in whole valleys. And it is equally opposed to the laws of historical criticism to found linguistic explanations on such *modern* forms as those of 1820, and not rather to go back to the forms of former centuries, which more nearly resemble the original ones.

These two latter considerations have induced me, in my researches on the Romanish of the ancient Rätia, to extend the material afforded by Conradi, and to search for the higher and more ancient linguistic forms.

The investigations which I have prosecuted latterly on this subject have fortunately introduced me to the works, as yet partly unpublished, of a native professor of the Rätoromanish—of Professor *Carisch* of Chur—by means of which, together with epistolatory communications from the same scholar, I hope to have found a firm footing on this field of philological inquiries.

Permit me, Sir, to enumerate to this honourable Society the chief results of the inquiries I have hitherto made, which I, under existing circumstances, can of course only consider as the first foundation for more profound research.

Of the three territorial divisions into which the former Roman province *Raetia* is at present divided, only the smaller portion, situated beyond the Alps, and belonging to Lombardy, has exclusively preserved the Roman element.

In the province of *Tyrol* the German element has long reigned; the inhabitants only speak Romanish, and that strongly impregnated with German, in the isolated villages of the western division, in the *Gröden valley*, in *Enneberg*, in the abbey *Beutchestein*, in the recesses of *Pusterthal*, in *Fodomi*, and in *Tauserthal*. Between these two elements lies the north-western portion of the former *Raetia*, the canton of the *Grisons*. Of the 90,000 souls composing its population at the present time, about 50,000 speak *Romanish*, viz. about 8000 in *Lower Engadine* (from *Martinsbruck* to *Brail*), 3000 in *Upper Engadine* (from *Brail* to *Sils*), 32,000 in *Oberland*, and about 7000 in the other villages between *Oberland* and *Engadine*. As the mountainous district of the *Grisons* is cleft into an innumerable quantity of divided valleys and villages, this circumstance must, at an early period, have divided the old Romanish tongue into a number of different idioms; and, added to this, the uncertain orthography which yet exists, so to say, in a state of nature, has subjected the most simple Latin word to a long chain of modifications which sometimes completely disguises the original form. Professor Carisch adduces the word *bucca* "not," as an example of this fact. Of this word there may be found no less than *forty-one different forms* in the northern half alone of the Romanish districts. They are—

bucca, bucc; buca, buc; bucha, buch; bocca, boc; bocha, boch; buoca, buoc; bouca, bouc; buitga, buig; boitgia, boitg, botg; puca, puc; ucca, uc; uca, uc; beca, bec; eccca, ecc; echa, ech; hecca, hecc; hecha, hech; bega, beg; beigia, beig; betgia, betg.

If it be borne in mind that the southern portion of the *Grisons* has also a great number of independent forms of the same word, compounded sometimes with the vowel *i*, as, *bichia, bitg, bich*, &c.; sometimes by the introduction of an *r*, as, *brichia*, &c.; and that in conversational language the latter half of the word is made use of alone, *i. e.* "*ca*" for "not," as in "*sas ca pli?*" "do you not know any more?" we may picture to ourselves the multiplicity of forms of the *Rätoromanish* idioms. Not being confined within the bonds of imperious grammatical or orthographical systems, they can

follow their natural genius, like the Swiss soil, which, without the assistance of art, produces the most varied vegetation merely in consequence of its infinite varieties of geographical situation.

In this diversity of idioms, the river domain of the *Inn* and of the *Rhine* form two distinct groups of languages, under one of which most of the other neighbouring idioms of the Grisons may be classed as further variations, according to their vicinity to one or the other. Only the idiom of the lovely valley of *Oberhalbstein*, situated in the centre of the Grisons, on the road from Chur to the *Julier Pass*, may, to a certain extent, be considered as an independent idiom; and the scattered elements of the Romanish language in Tyrol may also be considered as a separate group, as it deviates considerably from the chief idioms of the Grisons already enumerated.

Surveying this little space on which such numerous idioms prevail, many of them not extending beyond a mile, we are surprised by the fact that the same dispute about precedence, the same overvaluing of their own and undervaluing of other idioms which frequently exists between more important nations, is here repeated in miniature. Professor Carisch says, in the preface to his *Pocket Dictionary of the Raetoromanish Language* (Chur, 1848, p. iv.)—

“Gladly as the author of this work acknowledges a difference between the better and inferior among our dialects in general, he has hitherto not been able to arrive at a satisfactory conviction of the unconditional priority of one before all other Raetoromanish dialects. And from the contradictory views which are advanced on all sides, it may be presumed that the people themselves have not yet formed a conclusive opinion on the subject. It is undeniable, that however exultingly many an Engadinian may look down upon the Romanish on this side of the hills, or, as he generally contemptuously calls it, the ‘*Shalauer*,’ the Oberländer still shew little inclination to grant this pretended superiority unconditionally to the Engadine tongue. And again, in the simple valleys beyond and on this side of the mountains, between nearer and more distant

districts, between Upper Engadinians and Lower Engadinians, the inhabitants of *Disentis* and *Gruben*, of *Schams* and *Heinzenberg*, of *Domleschg* and *Oberhalbstein*, there is everywhere the same combat and the same firm conviction, and at every discussion the boldest assertions, that the best, the most beautiful, the most euphonious, and the sweetest Romanish is undeniably—*their own*. In this unsatisfactory condition the settlement of the question stands at present, and it may be long before a competent decision can be arrived at."

We may add that the position of this quarrel is still more unsatisfactory, when we consider the ever-growing danger that all these idioms will be swallowed up by the German language within a few generations, and the unjustifiable carelessness which leads many districts now to fill the pulpit and desk with men who understand only German and not a word of Romanish, and who thus are themselves advancing the gradual extinction of their language.

Another cause for the gradual subjection of these mountain idioms to the German language is the want of a literature in its real sense. The tender flower of poetry cannot flourish here, under the frigidity of eternal snow, where, according to a native proverb, it is "nine months winter and three months cold." ("*Nus hasein nov meis unviern a treis meis freid*"), or, as the Italian expresses it—

"Engadina, terra fina,
Se non fossi la pruina."

Nor can the tree of knowledge find space to extend its roots here. Only *religion*, which finds a soil for its blessed fertility, wherever human hearts beat—religion only has created a small but meritorious literature here. The first book which was published here a century after the discovery of printing, in 1551, was the translation of the Catechism, by *Jachiem Bifrun* or *Bivrone*, of Samaden, in Upper Engadine. Nine years subsequently (1560), he, at his own expense, published a translation into the Upper Engadine tongue of the New Testament. Forty-one years later (1601) a translation of the Catechism was published in the Romanish dialect of the Oberland, which was followed in 1606 by a translation of the

Psalms for the use of churches in Lower Engadine, by the reformer, Dr. *Ulrich Cambell*. In 1648 a New Testament in the Romanish of the Oberland, by pastor *Luci Gabriel*, appeared, and was followed, in 1679, by the entire Bible in the Lower Engadine dialect; and, in 1718, the same, in the idiom of Upper Engadine. In the present century, partly by the assistance of the British and Foreign Bible Society (regarding which the sixth and ninth report will give further explanation), the New Testament has been printed in the dialect of the Lower Engadine and Oberland, and many thousand copies distributed among the inhabitants.

In consequence of the improvement in educational establishments made by both Protestants and Catholics, much trouble has latterly been bestowed on the composition of good schoolbooks in the three chief dialects (viz. of Upper and Lower Engadine, and the Oberland); and it is chiefly these patriotically disposed teachers who are endeavouring to oppose the advance of the German elements.

The attempt has even been frequently made within the last fifteen years to edit political papers in the Romanish of Engadine and Oberland, but many of them ceased again after a very short existence. At present two such newspapers appear in the Oberland dialect—" *Amitg d'igl pievel*" (the People's Friend), and "*Il Romonsch*." Of the latter, which is a weekly paper, containing four pages in small folio, the first eighteen numbers of this year, down to the 29th April, have been sent to me; and it is of peculiar interest to see how, under the head "*Exteriur*" (foreign affairs), the great and small events of the world beyond the mountains are treated with political liberality, and brought within the comprehension of these simple mountaineers. It is curious to read how, from "*Engeltiaria*" (England), the great banquet of the Lord Mayor, and the declarations of Lord Derby, are communicated, and the highly remarkable meeting of the Deaf and Dumb Society; or from "*Fronsch*" (France), the "*cuolp statistic*" (coup d'etat) of Louis Napoleon; or from "*Spaynia*" and "*Portugal*," that they are bankrupt ("*fan bancrutt*."). But the Home Department also offers many facts of great interest, which charm increases by being expressed in the naïve uncultivated idiomatic

tongue. One curious report especially, from St. Gallen, is so characteristic in form and contents, that it is worth the trouble to copy it here in the original, with the verbal translation. The subject is, the lines of telegraph which are now being laid down through Switzerland, and for which subscriptions have been made in the cantons separately. A telegraph office is to be erected in the village of *Alistaedten*, in St. Gallen. A meeting convened for the purpose has, by a large majority, voted the expenses, which will amount annually to 50 francs (about 2*l.*) for the house, and 200 francs (8*l.*) for the expenses. After this calculation, which is an interesting evidence of the scale of monetary relations there, the reporter continues—

“Ina minoritad vulera accordar tuttavia nuot per telegrafs, essent dil meini: quei che jeu enconuschel buc, magliel jeu buc; giè in oratur, il qual en mintgia redunonza da vischneunca plaida *igl emprim* e cun sia aulta, sonorira vusch se fa udir per tutt la baselgia, teneva il telegraf per in *um*, aschia ina sort de quels, che fan da cuorrer, 500 els se produceschen tschen e leu sen las vischneum cas, e vuleva perquei nuot saver da quei ‘*pac de comediants*’; quei che quels empermettien, seigi per ordinari cugliunerias, et aschia seigi ci era tuttavia nunpusseivel, che quei ‘*Signur Telegraf*’ sappi cuorrer aschi dabot sco il cametg et en aschi cuort tems ir a Constantinopel e sappi Dieus nua. Il vischinadi duei buc se schar cugliunar da quei ‘*engonnadar*,’ ei cuosli eung avunda, et in hagi autras spesas pli necessarias, che da procurar locals per tala lumperaglia; quels dueigien luvrar e gudogniar lur peun sin undreivla moda, &c.”

Which means—

“A minority refused to grant any thing for telegraphs, being of opinion, ‘What I don’t know I will not have (eat):’ nay, one orator, who always plays the most prominent part in every meeting of the village, and whose loud sonorous voice is plainly heard through the whole church (the place of meeting), considered the telegraph to be a *man*—one of that kind who

race fast, as they are met with now and then in the villages, and wanted, therefore, to have nothing to do with such a *pack of strolling players*; that whatever they promised was generally deception; and it was indeed quite impossible that this *Mr. Telegraph* should be able to run as quickly as lightning, and in as short a time, to Constantinople, or God knows whither. He advised the community not to be cheated by this *deceiver*. Besides, the outlay was exorbitant, and they had more necessary expenses than to find houses for such *vagabonds*; they ought to work and earn their bread honestly, &c.”

If we now consider the Romanish language in Switzerland and Tyrol, how it has been modified in the course of centuries to its present condition, the solution of the first and most important question, namely, as to its origin and its relation to the other European languages, can present no difficulties. Considered lexicographically or grammatically, it is evident that the Romanish of the ancient *Raetia* is the immediate continuation of the former popular language of the Romans, the so-called *Lingua Romana rustica* or *vulgaris*, which, from the peculiar local position, and the low intellectual standard of the inhabitants—soldiers, shepherds, and hunters, form the majority—has formed itself somewhat rudely and wildly in sound and writing, but which has remained faithful to its origin in the essential laws of the language. It has, at the same time, like its Roman progenitor, maintained cultivating power enough in itself, that it can, when requisite, appropriate foreign names of objects, and generally subjects them to a more or less violent modification to render them conformable to its own genius.

After reviewing and calculating the at present existing words of this language in its two chief dialects, and including all the usual deviations of words, the Romanish of the Engadine contains about 8000, that of the Oberland about 12,000 words. If we divide each of these two lists of words into ten parts, the *Engadine Romanish* contains eight-tenths Roman, one-tenth German, and one-tenth etymologically doubtful or unknown parts; but the *Oberland Romanish* contains six-tenths Roman, three-tenths German, and one-tenth etymologically doubtful or entire unknown words.

The especial examination of each of these parts affords a profusion of interesting revelations to discuss, which would of course require a comprehensive work on the subject. I shall give only a few prominent facts.

The first word already in the Romanish translation of the New Testament is of especial interest to the philologist. "The Book of the generation of Jesus Christ" is translated in the Lower Engadine—"Cudesch dalla generatiun da Jesu Christo; in the Oberland Romanish"—"*Teg cudisch da la naschienscha da Jesu Christ.*" The *cudesch* of the one and the *cudisch* of the other, which every one will recognise as the Latin *codex*, is the only name for "book" in all the dialects of the Raetoromanish, while the Latin *liber* is quite discarded. It is interesting now to find that the *Wallachian* or *Dakoromanish*, which, from its isolated and independent process of development affords many points of resemblance with the Raetoromanish, has also lost the Latin *liber*, and substituted in its stead *karte* (Lat. *charta*). This phenomena, as is well known, is by no means an isolated fact in the Romanish languages, and arises from the great diversity of the *Lingua Latina*, or cultivated written language, and the *Lingua Romana* as the popular language of the Romans. Thus the classic Latin *equus* "horse," has been superseded by the vulgar *caballus*, literally, "a jade," "a nag;" Spanish, *caballo*; Ital. and Portug. *cavallo*; French *cheval*; and in the different Raetoromanish dialects, *chaval*, *cavaigl*, *chavail*, and *tgivail*; Wallach. *kal*. In the same manner the classic Latin, *os*, *oris* "mouth," has given way to the vulgar *bucca*, literally, "cheeks;" Ital. *bocca*; Span. *boca*; Portug. *bocca* and *boca*; French *bouche*: Raetorom., either according to the oldest form *buoca*, or also *bocc* and *buccha*. Nor do the Raetoromanish languages possess the classic Latin *ignis* "fire," but only the stronger *focus*, literally, "fireplace," "hearth;" Ital. *fuccho*, Span. *fuego*, Portug. *fogo*, French *feu*; the Raetorom. is *feug*, *fieur* or *fo*, and the Wallach. *fók*.

The Raetoromanish affords also some examples quite peculiar to itself of this characteristic feature of the Romanish languages. The "word" is not called after the Latin *verbum* in the present Raetoromanish dialects, but—and this is the case

in no other Romanish language, *pled*, or *plaid*. For "In the beginning was the word," stands, in the Lower Engadine translation—" *In il principi eira il pled*," and in the Oberland translation—" *Enten l'antschetta fov' ilg plaid*." Here the specially judicial expression *placitum* has taken the place of the common *verbum*, as in the more cultivated Romanish languages the Greek, as it were, more aristocratic *parabla*, *paravla*, *parola*, and *parole* (Greek *παραβολή*, "an illustration"), while the Wallachians have kept the Latin *verbum*, and modified it into *vorbë*. It now deserves an especial notice, that in the Upper Engadine translation of the New Testament of the year 1560 "word" is rendered "*vierf*," and in the plural even more like the original form *verba*. If we remember now, that in the oldest Latin, when the popular and the written language were yet the same, *mius* was also said instead of *meus*, (whence the Latin vocative *mi*, the Ital. pronoun possessive *mio*, and Spanish *mi*,) we have the surprising fact, that between the ice plains of the Swiss mountains, where we anticipate the most confused mixture of language the expression *la mia verva*, "my words," has preserved the original Latin *illa mia verba* in sound and form much better than any other spot on the great Roman territory.

Like *cudesch* or *cudisch* for *liber*, and *pled* or *plaid* for *verbum*, it is peculiar to the Raetoromanish language to render "red" by *cotschen* (Latin *coccinus*, literally, "purple"); "yellow" by *mellen*, (*i.e.*) *mellinus*, literally "honey-coloured"; "mountain" by *culm*, (*i.e.*) *culmen*, "a point"; and, what deserves particular notice, "man" by *crastian*, or *carstiaun*, (*i.e.*) *Christianus*, "Christian." The English language, indeed; sometimes employs "Christian" and "man" as synonymous terms; but it seems a strange and peculiar anachronism when the Raetoroman gospel makes Christ himself express the warning: "Woe to that man by whom the offence cometh," in the words: "*Vae à quel crastian tras il qual scandal vain*" (Matth. xviii. 7); or when the "Son of Man" is constantly rendered by "*Il filg dal crastian*."

The Raetoromish has preserved many peculiarities of the Roman mother tongue more firmly than the other sister languages, grammatically as well as lexicographically. We have

seen that the neutral form of the plural has been preserved in *la verva* from *il vierf* "the word." The Raetoromanish possesses a great number of such old neutral forms, as isolated remains of the *genus neutrum* of substantives, which it has, as a rule, given up, in common with the other Romanish languages. Thus, the Raetoromanish *il member*, "the limb," Lat. *membrum*, is in the plur. *la membra*: thus, *ilg bratsch*, "the arm," Lat. *brachium*, plur. *la bratscha*, *ilg iess*, "the bone," Lat. *os, ossis*, plur. *l'ossa*; *il chiern* or *corn*, "the horn," Lat. *cornu*, and, in the farming idiom of Varro also *cornum*, plur. *la corna*, &c.

A similar indistinct assumption of the existence of a neutral gender is seen in the *adjective*. While an *s* is added to the mascul. adj., when they are placed as a predicate after the verb (*to be* f. ex. "this man is tall and healthy"—*quei hum ei gronds a sauns*), the *s* is omitted in neutral expressions, as "it is good, beautiful," &c. *ei e' bun, bial*, not *buns, bials*, &c.

But one peculiarity of the Raetoromanish deserves especial notice, namely, that the plural of all nouns, excepting of course the above enumerated remnants of a neutral term in *a*, (as *membra, ossa, corna*, &c., is formed like the Spanish, Portuguese, and French, by an *s*, while the Italian and the Provençal, to which the Raetoromanish is locally the nearest, has not this plural *s*.

In this point the Raetoromanish proves itself more Roman than the Latin language itself, which has no nominatives in the plural, as *poetas, mensas, caballis*, &c. But it has not been sufficiently considered hitherto that the *Lingua Romana vulgaris*, possessed such plurals in *s*. The plural forms of the nominative *duomvires* for *duomviri*, *facteis* for *facti*, *leibereis*, for *liberi*, *patrimes* and *matrimes* for *patrimi* and *matrimi*, *Vituries* and *Vituris* for *Vitirii*, *Herennieis* for *Herennii*, &c., are proved by inscriptions and evidences of the grammarians. Added to this is a highly interesting fragment of an *Atellane* (popular farce) of Pomponius, in which even the plural of the feminine of the first declension is not *ae*, but *as*: *Quot laetitias insperatas modo mihi inrepsere in sinum*, "what unhopd for joys have just entered my heart!" If we consider now that the Sardinian dialect, although it belongs to the Italian idioms, adds an *s* in the plural f. i. *'is celus*, "the heavens,"

is feminas, "the women": that the comparison of languages in all the varieties of the Indo-European families establishes the *s* to be the original sign of the plural; that in several Latin glossaries the nominal plural *sententias*, *causas*, *villas*, is found; and that the subsequent popular tongue, especially in France, changed the Latin names of people from *i* into *s*, and made them names of towns (whence, for example, this metropolis has undergone a change from *Londinium* into *Londres*); this firm and universal use of the plural *s* in the Raetoromanish proves such an intimate connection with the original *Lingua Romana*, and, through it, indirectly with the languages of the Indo-European family springing from the same root, as could here have been least anticipated.

I should esteem myself fortunate if I had succeeded, by what I have explained here, in awaking the interest of those for a language hitherto undeservedly undervalued and neglected, who consider the investigation of languages to be the surest means for ethnological researches, and especially of all those who, in the approaching season for excursions to the Continent, will have the opportunity, surrounded by the wonders of alpine scenery, of hearing and investigating the last venerable sounds of that ancient tongue before it will have succumbed to the fate of all earthly things, and its tones will have died away and become extinct for ever.

A MANUAL
OF
ETHNOLOGICAL INQUIRY.

A SUB-COMMITTEE of the British Association for the Advancement of Science, consisting of Dr. Hodgkin and Mr. Cull, was appointed at the Ipswich meeting, 1851, to prepare a new edition of the questions concerning the human race, and 12*l*. was placed at their disposal for printing it. These questions, contained in a small pamphlet, were little more than a translation of those issued by the Paris Ethnological Society. The Sub-Committee endeavoured, by various modifications, to render the new edition still more useful as a guide for studying man ethnologically. The title was changed, an edition of three thousand was printed for the 12*l*., and is in course of circulation for the guidance of travellers, missionaries, and others, in collecting the kind of knowledge which we seek. Copies of the Manual can be obtained on application to Dr. Hodgkin, 35 Bedford Square; to John Phillips, Esq., F.R.S., York; or to Richard Cull, Esq., 13 Tavistock Street, Bedford Square, to whom answers to all or any of the questions contained in the Manual are requested to be sent.

The Council of the Ethnological Society considers this Manual should be preserved, and it is accordingly reprinted here.

The late Dr. Prichard read a paper at the Meeting of the British Association held at Birmingham in 1839, 'On the Extinction of some varieties of the Human Race.' He cited instances in which total extinction has already taken place, and other instances in which a continually decreasing population threatens a total extinction. He pointed out the irretrievable loss to science if so many tribes of the human family are suffered to perish, before those highly important questions of a physiological, psychological, philological, and historical character, in relation to them, have been investigated. In order to rightly direct inquiry into the subject, a set of questions was drawn up by a Committee of the British Association, which was largely

circulated by means of successive grants of money for that purpose. These questions were, however, adapted, not only to direct inquiry respecting those tribes which are threatened with extinction, but also to the rest of the human family. The object in publishing these questions is to induce Consuls, political and other residents and travellers, to obtain precise knowledge in reply to them, and to send it to a centre—the British Association.

It should always be borne in mind that the verification of what is already known is of importance in Ethnology, as in other sciences. The discovery of new tribes of the human family falls to the lot of but few observers, while many have the opportunity of adding to our knowledge of those tribes that are partially known; besides which, recent observation may differ from the older in consequence of changes that may have taken place in the people. Any amount of knowledge, however trifling it may appear in itself, may be of great value in connexion with other knowledge, and therefore will be welcomed. We are seeking facts, and not inferences; what is observed, and not what is thought.

The following questions might be much increased in number, and the reasons and motives for framing them stated, but such detail would swell the tract to a volume.

Physical Characters.

1. Ascertain the form, size, and weight of the people. Measure the height of several men; state those measures, and whether they are above or below the ordinary stature. Measure the length of the limbs, giving the situation of the elbow and knee. Measure the circumference of the chest, thighs, legs, arms, neck, and head of the same men; and weigh the same men. Observe if the women be less than the men in stature and relative dimensions; and, if possible, measure and weigh them also. If any remarkable deviations above or below the ordinary stature occur in the adults, measure and weigh them also.

2. Note if there be any prevailing disproportion between different parts of the body, or any peculiarity of form.

3. What is the prevailing complexion? It is impossible to

accurately describe colour by words. The best method is to imitate the colour on paper: if this be impracticable, state what the colour is in comparison with some well-known complexion. The colour and character of the hair can be obtained by bringing home specimens. State at what age the hair falls off or turns grey. The colour, form, size, situation, and other character of the eyes should be accurately described. It is very desirable to obtain individual likenesses by means of some photographic process.

4. Is there, apart from lack of personal cleanliness, any peculiar odour, as in the Negro? If so, describe it.

5. The importance of the head claims particular attention. The head consists of two parts, viz. the face and the brain-box. Is the shape of the face round, oval, long, broad, lozenge-shaped, or of any other marked form? In addition to the best verbal description, give three sketches of the whole head, by which means the character of the features, their relation to each other and to the whole head, can be at once displayed. These sketches should be—1st, a profile; 2dly, a front face; and 3dly, a view looking down on the top of the head. Let sufficient neck be taken in order to shew how the head is set on and carried. And in these sketches accuracy of drawing is indispensable, without which, picturesque effect is valueless.

The form and size of the head, and the relative proportions of its parts, can be obtained with minute precision, by measuring it in the method laid down by phrenologists. If the observer be competent, by a previous study of phrenology, he is requested to observe the manifestations of mind in connexion with the cerebral development, as indicated by the form, size, and proportions of the head.

6. Human skulls should be collected, and care should be taken to bring away such specimens as fairly represent the people. Remarkable skulls should also be preserved and marked as such: their deviations should be accurately described. And besides those specimens which are brought away, it is desirable to observe certain things in a large number, always stating the number observed.

a. Is the os frontis divided by a middle suture?

- b. Are the skull-bones thick, thin, heavy, light, dense, &c.?
 - c. Are the sutures much indented?
 - d. Are ossa triquetra frequent? If so, in what sutures do they occur?
 - e. Does the squamous bone well abut on the frontal bone?
 - f. Open some crania to ascertain if there be large frontal sinuses: if so, state the condition of the ossification, and also of the teeth.
 - g. Observe the bones of the face, their relation to each other, and to the cranium.
 - h. What is the form of the outer orbital process?
 - i. Is the palatine arch flat or vaulted?
 - j. Does the upper jaw project forwards?
 - k. What is the form of the lower jaw?
 - l. What is the shape of the chin?
 - m. What is the relative position of the ossa nasi and unguis?
 - n. What is the situation of the foramen magnum?
 - o. What is the state of development of the paroccipital processes?
 - p. Observe the number, position, character, and mode of wear of the teeth.
 - q. Have they any artificial means of modifying the form and appearance of the teeth?
7. The number of lumbar vertebræ should be ascertained, as an additional one is said to occur in some tribes.
8. Measure the length of the sternum and that of the whole trunk, so that comparisons may be instituted.
9. Give some idea of the relative magnitudes of the chest and abdomen.
10. What is the character of the pelvis in both sexes?
11. What is the form of the foot?
12. The form of the scapula deserves attention, especially its breadth and strength, and the clavicle also in relation to it.
13. The blood-vessels and internal organs can be subjected to examination, but with greater difficulty: observe any peculiarities in regard to them.

Peculiarities may exist which cannot be anticipated by special question: the observer should, if possible, examine

each organ in detail, and, comparing one with another, he will find few things escape him.

14. Are Albinos found? if so, what characters do they present? State their parentage, and all that can be gathered to throw a light on their origin. State the physical characters of their children, if they have any.

15. Where a district obviously possesses two or more varieties of the human race, note the typical characters of each in their most distinct form, and indicate to what known groups or families they may belong; give some idea of the proportion of each; and state the result of their intermixture on physical and moral character. When it can be ascertained, state how long intermixture has existed, and of which the physical characters tend to predominate. It is to be observed, that this question does not so much refer to the numerical strength or political ascendancy of any of the types, but to the greater or less physical resemblance which the offspring may bear to the parents, and what are the characters which they may appear to derive from each: whether there is a marked difference arising from the father or the mother belonging to one of the types in preference to another; also whether the mixed form resulting from such intermarriage is known to possess a permanent character, or, after a certain number of generations, to incline to one or other of its component types.

16. Any observations connected with these intermarriages, relating to health, longevity, physical and intellectual character, will be particularly interesting, as bringing light on a field hitherto but little systematically investigated. Even when the people appear to be nearly or quite free from intermixture, their habits, in respect of intermarriage with larger or smaller circles, and the corresponding physical characters of the people, will be very interesting.

Language.

17. The affinity of languages is one line of evidence of high value in ethnological researches, and hence the importance of obtaining accurate information concerning the language of a people.

18. If the language be a written one, care should be taken to obtain specimens of the best compositions in it, both of verse and prose. If possible, procure native manuscripts; if not, obtain copies of them.

If there be no written language, and therefore no literature, yet traditions will be found which should be obtained and recorded, as closely as possible, verbatim, so as to preserve their own collocation and arrangement of words, taking care to select as the most valuable such as relate to their own origin, history, wars, habits, superstitions, &c.

19. If possible, cause some competent person to translate into their language a well-known continuous composition, as the Lord's Prayer, the 1st chapter of Genesis, and the 6th and 7th chapters of St. Luke's Gospel; for with these examples a philologist will be able to give a very good account of any language.

20. In compiling a vocabulary from the mouth of an intelligent native, two objects must be steadily kept in view, viz. 1st. the right selection of words; and 2dly, their accurate reproduction.

1st. *The proper selection of words.*—In selecting the words to form the first vocabulary of a strange language, we must reject,—1st, all words which have no corresponding words in our own language; 2dly, all words which only imperfectly correspond to words in our own language; and take only such words as perfectly correspond. Words are names of things, events, qualities, conditions, &c. Words of the following classes should be taken:—

- a. The names of natural physical objects, as *sun, moon, fire, water, man, arm, river, hill, &c.*; the names of animals, &c.
- β. The names of physical qualities, as *red, blue, round, long, heavy, &c.*
- γ. The names of events, actions, conditions, &c., as *to fall, to walk, to eat, to sleep.*
- δ. The names of family relationships, as *father, mother, sister, uncle, &c.*
- ε. The names of the numbers as high as they can enumerate. The ordinal numerals should also be given.

It should be ascertained if there be Distributives, Multiplicatives, and Proportionals. Is there any thing corresponding to our Numeral Adverbs?

ζ. Personal Pronouns.

η. Particles such as prepositions, conjunctions, &c.

In compiling a vocabulary, the observer should verify every word he receives from one informant by the testimony of others.

2dly. *Their accurate reproduction.*—The words should be so written, that a person quite ignorant of the language, and with no other guide than the vocabulary, shall be able from it alone to pronounce each word with accuracy, sufficient for philological researches.

If elementary sounds peculiar to the language, as the clicks of the Kaffirs, or the sounds represented by *ص* and *ع* of the Persian alphabet, occur in the words of the vocabulary, it is obvious that no alphabetic notation will enable one who is ignorant of the language to reproduce those words, even though the compiler invents characters to represent them. Mr. Ellis's Ethnic Alphabet is a useful stock of characters to those whose lingual knowledge is sufficient to use it. Our own alphabet, however, is found to be sufficient to write many vocabularies, including both Kaffir and Persian, with an accuracy sufficient for our purpose.

In writing the vocabulary, it is of great importance to mark the accented syllable of the word. The mark ' of the acute accent is commonly adopted for this purpose, and is recommended to be continued by future compilers.

21. Ascertain the extent of the geographical area over which the language is spoken.

22. Ascertain what languages it comes in contact with at the periphery of its area; and if unknown or but partially known languages occur, collect vocabularies of them also.

23. Ascertain if the same language without dialectic variations be spoken over the whole lingual area. If variations occur, give examples of them; always bearing in mind that facts are of greater value than opinions.

Grammar.

In giving an outline of the Grammar, the following hints may be useful:—

24. Give the various forms which words assume, as—
 - a. The plural forms of Nouns, and the dual if it exist.
 - β. The cases of Nouns.
 - γ. Adjectives, their inflections and modes of concord.
 - δ. Pronouns, their various forms, with the dual if it exist.
25. Exhibit the formation of compound words.
26. What is the order of words in a sentence?
27. Beyond the mere order of words, observe if the subject take precedence of the predicate; the cause of the effect; and of any peculiarity in the statement of propositions.

Individual and Family Life.

28. Are there any ceremonies connected with the birth of a child? Is there any difference whether the child be male or female?

29. Does infanticide occur to any considerable extent; and if it does, to what causes is it to be referred—want of affection, deficient subsistence, or superstition?

30. Are children exposed, and from what causes, whether superstition, want of subsistence or other difficulties, or from deformity, general infirmity, or other causes of aversion?

31. What is the practice as to dressing and cradling children, and are there any circumstances connected with it calculated to modify their form; for example, to compress the forehead, as amongst the western Americans; to flatten the occiput, as amongst most Americans, by the flat straight board to which the child is attached; to occasion the lateral distortion of the head, by allowing it to remain too long in one position on the hand of the nurse, as amongst the inhabitants of the South Seas?

32. Are there any methods adopted, by which other parts of the body may be affected, such as the turning in of the toes, as amongst the North Americans; the modification of the whole foot, as amongst the Chinese?

33. How are the children educated, what are they taught, and are any methods adopted to modify their character, such as to implant courage, impatience of control, endurance of

pain and privation, or, on the contrary, submission, and to what authorities, cowardice, artifice?

34. Is there any thing remarkable amongst the sports and amusements of children, or in their infantile songs or tales?

35. At what age does puberty take place?

36. What is the ordinary size of families, and are there any large ones?

37. Are births of more than one child common? What is the proportion of the sexes at birth and among adults?

38. Are the children easily reared?

39. Is there any remarkable deficiency or perfection in any of the senses? It is stated, that in some races sight is remarkably keen, both for near and distant objects.

40. To what age do the females continue to bear children; and for what period are they in the habit of suckling them?

41. What is the menstrual period, and what the time of utero-gestation?

42. Are there any ceremonies connected with any particular period of life?

43. Is chastity cultivated, or is it remarkably defective; and are there any classes amongst the people of either sex by whom it is remarkably cultivated, or the reverse, either generally or on particular occasions?

44. Are there any superstitions connected with this subject?

45. What are the ceremonies and practices connected with marriage?

46. Is polygamy permitted and practised, and to what extent?

47. Is divorce tolerated, or frequent?

48. How are widows treated?

49. What is the prevailing food of the people? Is it chiefly animal or vegetable, and whence is it derived in the two kingdoms? Do they trust to what the bounty of nature provides, or have they means of modifying or controlling production, either in the cultivation of vegetables, or the rearing of animals? Describe their modes of cooking, and state the kinds of condiment which may be employed. Do they reject any kinds of aliment from scruple, or an idea of uncleanness? Have they in use any kind of fermented or other form of exhilarating liquor, and, if so, how is it obtained? What number of meals

do they make? and what is their capacity for temporary or sustained exertion?

50. Describe the kind of dress worn by the people, and the materials employed in its formation. What are the differences in the usages of the sexes in this respect? Are there special dresses used for great occasions? and, if so, describe these, and their modes of ornament. Does any practice of tattooing, piercing, or otherwise modifying the person for the sake of ornament, prevail amongst the people? [*N.B.* Such modifications not to be blended with other modifications used as signs of mourning, &c.]

51. Have the people any prevailing characteristic or remarkable modes of amusement, such as dances and games exhibiting agility, strength, or skill?

52. Are games of chance known to the people, and is there a strong passion for them?

53. Do the people appear to be long or short-lived? If any cases of extreme old age can be ascertained, please to state them. Such cases may sometimes be successfully ascertained by reference to known events, as the previous visits of Europeans to the country. Is there a marked difference between the sexes in respect of longevity?

54. What is the general treatment of the sick? Are they cared for, or neglected? Are any diseases dreaded as contagious, and how are such treated? Is there any medical treatment adopted? Are there any superstitious or magical practices connected with the treatment of the sick? What are the most prevailing forms of disease, whence derived, and to what extent? Is there any endemic affection, such as goitre, pelagra, plica, or the like? With what circumstances, situations, and habits do they appear to be connected, and to what are they referred by the people themselves?

55. Where there are inferior animals associated with man, do they exhibit any corresponding liability to, or exemption from, disease?

56. Do entozoa prevail, and of what kind?

57. What is the method adopted for the disposal of the dead? Is it generally adhered to, or subject to variation?

58. Are any implements, articles of clothing, or food, deposited with the dead?

59. Is there any subsequent visitation of the dead, whether they are disposed of separately, or in conjunction with other bodies?

60. What is the received idea respecting a future state? Does this bear the character of transmigration, invisible existence about their accustomed haunts, or removal to a distant abode?

Buildings and Monuments.

61. What are the kinds of habitations in use among the people? Are they permanent or fixed? Do they consist of a single apartment, or of several? Are the dwellings collected into villages or towns, or are they scattered, and nearly or quite single? If the former, describe any arrangement of them in streets or otherwise which may be employed.

62. Have any monuments been raised by the present inhabitants or their predecessors, and more especially such as relate to religion or war? State their character, materials, and construction. If they are still in use amongst the people, state this object, even if they should be of the simplest construction, and be little more than mounds or tumuli. If these monuments are no longer in use, collect, as far as possible, the ideas and traditions of the natives regarding them, and, if possible, have them examined by excavation or otherwise, taking care to deface and disturb them as little as possible.

63. In these researches, be on the look out for the remains of the skeletons of man or other animals; and, if discovered, let them be preserved for comparison with those still in existence.

Works of Art.

64. Let works of art, in metal, bone, or other materials, be likewise sought and preserved, and their similarity to, or difference from, implements at present in use amongst the people of the district, or elsewhere, be noted. Have they any kind of commerce or exchange of commodities with the people of other tribes or countries, civilized or uncivilized? and if so, what are the articles which they give and which they take in exchange? Is this trade or barter in continued or irre-

gular operation, or periodical by means of fairs, stated journeys to or visits from other people ?

65. Name the people and channels of this trade.

66. Is it of long standing or recent ?

67. Has it undergone changes, when and how ?

68. When a people display their ingenuity by the extent or variety of their works of art, it will not only be desirable to describe what these are, but also the materials of which they are constructed, the modes in which these materials are obtained, the preparation which they undergo when any is required, and the instruments by which they are wrought. Such particulars will not only throw light on the character and origin of the people, but will, directly or indirectly, influence the commercial relations which may be profitably entered into when commerce alone is looked to. When colonization is contemplated, the facts contained in the replies to these queries will point out the mutual advantages which might be obtained by preserving, instead of annihilating, the aboriginal population.

Domestic Animals.

Are there any domestic animals in the possession of the people ? Of what species are they ? Whence do they appear to have been derived, and to what variety do they belong ? Have they degenerated or become otherwise modified ? To what uses are they applied ?

Government and Laws.

69. What is the form of government ? Does it assume a monarchical or democratic character, or does it rest with the priests ?

70. Are the chiefs, whether of limited or absolute power, elective or hereditary ?

71. Is there any division of clans or casts ?

72. What are the privileges enjoyed by or withheld from these ?

73. What care is taken to keep them distinct, and with what effect on the physical and moral character of each ?

74. What laws exist among the people? How are they preserved? Are they generally known, or confided to the memory of a chosen set of persons? What are their opinions and regulations in reference to property, and especially the occupation and possession of the soil? Does the practice of hiring labourers exist among them?

75. Have they any knowledge or tradition of a legislator, to whom the formation of laws is ascribed?

76. Do they rescind, add to, or modify their laws? and how?

77. Are they careful in the observance of them?

78. What are their modes of enforcing obedience, and of proving and punishing delinquency?

79. How are judges constituted? Do their trials take place at stated periods, and in public?

80. How do they keep prisoners in custody, and treat them?

81. What are the crimes taken cognizance of by the laws? Is there gradation or commutation of punishment?

Geography and Statistics.

82. Briefly state the geographical limits and character of the region inhabited by the people to whom the replies relate.

83. State approximately the number of inhabitants. As this is an important, but very difficult question, it may not be amiss to point out the modes in which the numbers may be ascertained. The people themselves may state their number with more or less accuracy, but it should be known whether they refer to all ranks and ages, or merely comprehend adult males, who may be mustered for war, or other general purposes requiring their combination. In this case state the apparent proportion between adult males and other members of families. The number of habitations in a particular settlement may be counted, and some idea of the average numbers of a family be given. Where the people inhabit the water-side, the number and dimensions of their craft may be taken, and some idea of the proportion between the number of these and of the individuals belonging to them, may be formed. In drawing conclusions from observations of this kind, it will be necessary

to have due regard to the different degrees of density or rarity in which, from various causes, population may be placed.

84. Has the number of inhabitants sensibly varied, and within what period?

85. If it have diminished, state the causes; such as sickness, starvation, war, and emigration. When these causes require explanation, please to give it. If the inhabitants are on the increase, is this the result of the easy and favourable circumstances of the people causing an excess of births over deaths, or is it to be assigned to any cause tending to bring accessions from other quarters? State whether such causes are of long standing, or recent.

86. Is the population generally living in a manner to which they have been long accustomed, or have new relations with other people, and consequently new customs and practices, been introduced?

87. If the people, being uncivilized, have come under the influence of the civilized, state to what people the latter belong, how they are regarded, and what is the kind of influence they are producing.* State the points of their good influence, if any, and those of an opposite character, as the introduction of diseases, vices, wars, want of independence, &c.

88. Is there any tendency to the union of races? how is it exhibited, and to what extent?

Social Relations.

89. What kind of relationship, by written treaty or otherwise, subsists between the nation and other nations, civilized or not? Have they any intercourse by sea with other countries? Do any of them understand any European language? Or are there interpreters, by whom they can communicate with them?

90. Are they peaceable, or addicted to war? Have they any forms of declaring war, or making peace? What is their mode of warfare, either by sea or land? their weapons and

* This question will comprise the existence of missions—the success or the want of it from causes connected with missionaries themselves, or others.

strategy? What do they do with the slain, and with prisoners? Have they any mode of commemorating victories by monuments, hieroglyphics, or preservation of individual trophies, and of what kind? Have they any national poems, sagas, or traditions, respecting their origin and history? Where Europeans have introduced fire-arms, ascertain the modes of warfare which have given place to them.

State whatever particulars respecting their origin and history are derived, either from traditions among themselves or from other sources.

Religion, Superstitions, &c.

91. Are the people addicted to religious observances, or generally regardless of them?

92. Do they adopt the idea of one great and presiding Spirit, or are they polytheists?

93. If polytheism exist, what are the names, attributes, and fables connected with their deities, and what are the modes in which devotion is paid to each? Are any parts of the body held sacred, or the reverse? Do they offer sacrifices, and are they of an expiatory character, or mere gifts?

94. Have they any sacred days or periods, fixed or moveable feasts, or religious ceremonies of any kind, or any form of thanksgiving or other observance connected with seasons?

95. Have they any order of priests, and if so, are they hereditary, elective, or determined by any particular circumstance?

96. Is the religion of the people similar to that of any other people, neighbouring or remote? If different, are they widely so, or dependent on particular modifications, and of what kind?

97. In what light do they regard the religion and deities of neighbouring tribes?

98. Is there any idea of an inferior order of spirits and imaginary beings—such as ghosts, fairies, brownies, and goblins—and how they are described?

99. Have they any notions of magic, witchcraft, or second sight?

100. What ideas are entertained respecting the heavenly bodies? Have they any distinction of stars, or constellations? and if so, what names do they give them, and what do these names signify?

101. Are they in any manner observed with reference to the division of the year, and how?

102. If time is not divided by observations of those bodies, what other mode is adopted? and do observances connected with them rest with the priests or chiefs?

103. When the traveller, by personal acquaintance with the language, or by means of competent assistance from interpreters, can freely converse with the people, it will be desirable that he should form some idea of their amount of intelligence, their tone of mind with regard to social relations, as respects freedom, independence, or subserviency, and their recognition of moral obligations, and any other psychological character which observation may detect; and more especially such as may contribute to an estimation of the probable results of efforts to develope and improve the character.

In using this little manual, it should be borne in mind that it is not a mere guide to inquire into those tribes that are threatened with extinction, nor to make out certain details which are desiderata in our knowledge of the people of any given locality, but is intended to direct inquiry generally respecting the varieties of man.

ABSTRACT
OF
COMMUNICATIONS ON ETHNOLOGY,
MADE TO SECTION E. OF THE BRITISH ASSOCIATION
FOR THE ADVANCEMENT OF SCIENCE.

Read 10th November, 1852.

THE twenty-second meeting of the Association was held at Belfast, beginning on the 1st September 1852, and ending on the 7th September. All the sections met in Queen's College. Section E, devoted to Ethnology and Geography, met under the presidency of Col. Chesney, R.A. D.C.L. F.R.S., and the following office-bearers :

VICE-PRESIDENTS.

Sir R. H. Murchison, G.C.St.S. F.R.S.
Rev. Edward Hincks, D.D.

COMMITTEE.

His Grace the Archbishop of Dublin, F.E.S. Captain Allen, R.N. F.R.S. Rev. William Bruce, M.A. Rev. A. Hume, LL.D. F. Hindmarsh, F.G.S. F.E.S. Sir Henry Marsh, Bart., M.D. F.R.S. John Grattan, Esq. Professor MacDouall, M.A. Joseph Moore, M.D. F.E.S.	Rear-Admiral Sir John Ross. Colonel Sykes, F.R.S. Lieut. Macleod, R.N. J. G. Price, Esq. J. Beete Jukes, F.G.S. Wentworth Dilke, Esq. J. J. Murphy, Esq. Col. Sabine, R.A. F.R.S. Dr. M'Gee, R.N. Dr. Stranger, R.N.
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SECRETARIES.

Richard Cull. | Robert MacAdam. | Norton Shaw, M.D.

THURSDAY, September 2, 1852.

On the Ethnological Bearing of the Recent Discoveries in connexion with the Assyrian Inscriptions. By the Rev. EDWARD HINCKS, M.D.

Correct ethnological reasoning must be founded on facts, of the present or former existence of which we have satisfactory evidence; that is, statements in relation to them, reduced to writing while they existed, and that by persons who must have been cognizant of the reality of what they recorded. Facts of this nature may be isolated, or reduced to a system by those who recorded them. Of such a system we have a good example in the *Germania* of Tacitus, Dr. Latham's recent edition of which was warmly commended. Other collections of facts of a somewhat similar character were alluded to; but all had the disadvantage of recording much as to which the collectors had only imperfect information, indiscriminately mixed up with what they knew; and again, all such collections have come down to us through many copyists, in passing through whose hands they have been much depraved.

In these respects, they must yield to the collection of facts deducible from Egyptian or Assyrio-Babylonian records, of which we possess autographs, or at any rate copies made under the superintendence of the authors, while the facts were yet recent. Nor is danger to be apprehended from intentional misrepresenting. Facts connected with history would doubtless be presented in a manner more favourable to the royal authors of the inscriptions than truth would warrant. But in facts which most concern the ethnologist, there is in general no room for misrepresentation; they being facts which come out as it were accidentally, and as to which national vanity has no place.

The facts recorded in the Assyrian inscriptions are of more importance than those in the Egyptian, because they are not clouded as the latter are by ignorance in respect to their chronology or geography. The chronology of the period to which the most important Egyptian inscriptions and papyri belong is still a subject of controversy; while it was stated that the commencements of the reigns of Sargon and Sennacherib were

as certain as those of any of the Lagidæ or of the Cæsars, Dr. Hincks had announced in a paper recently read before the Royal Irish Academy, that the twelve first years of Sargon corresponded with the twelve years assigned in the Canon of Ptolemy to Mardokempad, which name is a corruption of that of Marduk Baladan. In the course of July he had identified the three years of the Belibus of the Canon (Belib) with the second, third, and fourth of Sennacherib. It followed from this that the reign of Sargon lasted eighteen years, and that the first interregnum of the Canon, which occupied two years, is to be referred to the last year of Sargon, and the first of Sennacherib. Sargon's reign began in 721 B.C.; Sennacherib's in 703 B.C. Marduk Baladan was three times conquered; first by Sargon, in 710; secondly, by Sennacherib, in 703; and thirdly, by the same king, in 700. On the first occasion, Sargon added Mesopotamia to his kingdom; on the second, Sennacherib gave it to Belibus; and on the third, he made his son Assurnadin king of Mesopotamia and Chaldea, which last country had been left to Marduk Baladan on the two former occasions. Dr. Hincks identified this name with the Aparanadius, which is the name of the successor of Belibus in the best MS. of the Canon of Ptolemy, which is, however, not an ancient one; the Greek *p* being a mistake for *ss*, which might easily have been occasioned by the similarity of these letters.

Before Sargon we have Shalmaneser, Tiglath Pileser, and Pul. Col. Rawlinson, who had first recognised the name of Marduk Baladan, has recently discovered a series of annals of Tiglath Pileser. In a fragment of the annals of Pul, Dr. Hincks discovered the name of Menahem as a tributary, in the eighth year of his reign. This being fixed by 2 Kings vi. to about 770, his reign must have commenced about 777. Divanubar, the obelisk king, must have begun to reign about 900 B.C., as Hazael, the commencement of whose reign is known to be about 885, was king in his eighteenth year, but not in his fourteenth. Col. Rawlinson has found a series of annals of the father of this king, in which Ithobal, king of Tyre, is mentioned. It appears from the Tyrian annals, extracted by Menander, and preserved by Josephus, that he reigned from

936 to 904, which is in perfect harmony with the date of his son's reign.

Reasons were then given why the geography of the Assyrian inscriptions was capable of being better determined than of the hieroglyphic ones; namely, that the Egyptian could only go in one direction to Asiatic countries, whereas the Assyrians made expeditions in all directions; and the direction in which an unknown country lay could generally be determined by that of other countries noticed along with it, if, indeed, it was not expressly pointed out by the king's saying that he went to it over the Euphrates or the Zab.

The great ethnological fact respecting Assyria—its language—was then treated of. Dr. Hincks considered the Assyrian language to belong to a family akin to that of the Syro-Arabian languages hitherto known, rather than to that family itself. He first pointed out what it had in common with all these languages. It had verbal roots, which were normally trilateral, but of which some letters might be mutable or evanescent, whence arise different classes of irregular verbs. These roots admitted not only the simple conjugation, but others in which radical letters are doubled, other letters added, or both these modifications made at once. From these roots verbal nouns are formed, either by a simple change of the vowels, or by the addition of letters, such as are called in Hebrew *Heemantic*.

It agreed with the Arabian more closely than with any other Syro-Arabian language in three respects: 1st. In forming the conjugations, consonants are inserted among the radical letters, as well as prefixed to them. This takes place regularly in Arabic, but in Hebrew only where the first radical is a sibilant. 2dly, The termination of the aorist varies as in Arabic; different verbs taking different vowels between the second and third radicals, while the first radical sometimes terminates the verb, and sometimes takes after it *a* or *u*. 3dly, The forms of the plural vary, and the cases of nouns differ in a manner which resembles, in some measure, what takes place in Arabic.

The Assyrian language differed from all the Syro-Arabian languages known hitherto in the following respects: 1st. Where they have *h*, it has *s* in a variety of instances, and

especially in the pronouns and pronominal affixes of the third person—*su, si, sunu*; *su, sa, si, sun* and *sin*, most of which resemble forms in other languages, if only *h* be substituted for *s*.

The same difference occurs in the characteristic of the causative conjugation. In these respects, but not by any means generally, the Assyrian agrees with the Egyptian, and, through it, with the modern Berber. 2dly, The Assyrian has no prefixes, such as *b* for *in*, *l* for *to*, which occur in all the Syro-Arabian languages. In place of these it has separate prepositions; and to avoid the awkwardness of joining these to the pronominal affixes, and perhaps for greater clearness, nouns are inserted, forming compound prepositions, as *ina kirbisu* "in its midst," for "in it." Compound prepositions may be used also before other nouns, as *ina kirib biti*, "in the midst of the house," for *ina biti*. Sometimes the Assyrian uses affixes as substitutes for prepositions. Instead of *ana*, "to" or "for," before a noun, *ish* may be added. Thus "for a spoil" is expressed indifferently by *ana shallati* and *shallatish*. This last form has much of the nature of an adverb, and has some resemblance to the Hebrew noun with *He* locative.* 3dly, The Syro-Arabian language made frequent use of a preterite, in which the distinctions of number and person are confined to the end of the root; but the Assyrian rejects it, or at least uses it in an exceedingly sparing manner. On this account Dr. Hincks proposed to consider the Benoni participle masculine singular *in regimen* as the root. 4thly, The varieties in the termination of the future are not connected with any particles that may precede them, but of themselves indicate different tenses. The termination in *u* is certainly a pluperfect. Thus where mention is made of "that Marduk Baladan whom I *had defeated* in my former campaign," the verb is *askunu*; but whenever "I defeated" occurs in the simple narration, *askun, askuna*, or in a different conjugation, *astakan* is used. This law has been fully established. The addition of *a* seems not to change the

* Since this was written, Dr. Hincks has been led to alter his views as to the final *ma*, which is not connected with the pronominal affix, but with the verb that precedes it, of which it modifies the sense; thus *addin-su-ma* is not "I gave to him," but "when I had given to him," or "having given to him."—(June 1853.)

sense; it is added to every verb when what it governs follows it, and to some verbs even where it precedes it. These are chiefly such as denote locomotion.

The resemblance of the most common Assyrian prepositions and of the pronouns to Indo-European forms is curious, and points to a common though remote origin.

The Babylonian inscriptions are in the same language as the Assyrian. This was probably the court language of Babylon; but the common people most probably used the Chaldean language, in which some parts of the books of Ezra and Daniel are written.



Description of a Samoied Family seen at Archangel, in a Letter to Dr. Hodgkin. By JOHN V. GILES.

During my late visit to Archangel I had an opportunity of observing a family of Samoieds, and beg to offer a description of them. They consisted of five individuals, the father, mother, and their children, and my interest was chiefly enlisted in them by their exceedingly diminutive stature.

In beating about the coast of Lapland for some weeks, and round the North Cape, I had accustomed myself to the low stature of the Laplanders, but the height of these poor wandering Samoieds approached dwarfishness.

The mother, who was about three inches taller than the man, was scarcely four feet high. The next most striking peculiarity I observed in them was a close resemblance in features to the Chinese, or to such of the Chinese people as I have seen about Lintin, Whampoa, and Canton, who are, I believe, a race between the Chinese and Tartars. The chief point of resemblance was the oblique set of the eyes in the head, they being also small, dark, and piercing; cheek bones high; hair long and black; complexion dark and swarthy. There appeared to be much labour expended upon their dress, which consisted of an infinite number of very small pieces of deer skins, cut into the shape of lozenges or diamonds, closely and rather neatly sewed together, the fur side of the skin turned inwards. Much pains seemed to be taken to ornament them, by plaiting and working up strips of skins into tassels.

The upper vestment resembled a strait jacket, having long sleeves closed at their extremities, which appeared to be used as a scrip; for when any thing was given to them they released the arm through an opening made under the armpit, and then drew the arm in again, depositing the article in the nether extremity of the sleeve.

The lower part of their dress terminated in and was joined to a sort of mocassin, made also as the upper portion, of an infinite deal of patchwork. I imagined they had been in the habit of exhibiting themselves to English vessels, for they had learned a few words in our language, and could ask for tobacco, biscuit, and beef. To my repeated inquiries as to where they came from, they pointed to the *north-east*.

They made me several visits during my stay, seemingly very much pleased with the gifts of tobacco and biscuits they received from me, but would never come on board the ship. Unlike the people around them, they would not drink raw spirits.

The youngest of the children I judged to be about three years of age. The man's features were regular and tolerably well-looking, but in the woman I discerned the marks of premature old age: she was wrinkled and had lost some teeth. Upon first seeing them I had taken them all for children from their size, until I came to look into the woman's face, when, seeing the marks of age, and making inquiries as well as I could, they made one understand their relationship.

As they are a people not much known, I have imagined an account of them, however short, by one who had personally met with them, might contribute to your researches in ethnology.

FRIDAY, September 3.

On the Ethnological Manual as a Guide in Ethnological Inquiry. By RICHARD CULL, Fellow and Hon. Sec. of the Ethnological Society.

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SATURDAY, September 4.

Notes upon a Collection of Irish Crania. By JOHN GRATTAN.

On placing this collection of ancient Irish crania before the

Section, the author offered a few remarks as to whence they were obtained, and as to their probable antiquity. For some years Mr. Grattan had been associated with Mr. Getty in his examination of the round towers in Ulster, having for his special object to rescue from destruction any crania that might be brought to light during Mr. Getty's proceedings. Ten round towers were examined in which various osseous human remains were found, including eleven crania. In all the towers, except that at Trummery, upon removing a greater or less depth of heterogeneous materials,—evidently the slow accumulation of ages,—a flooring of lime, apparently the result of the accidental dropping of mortar during the building of the tower, was reached, from which downwards the offsets that constituted the foundations of the tower extended, the interior being filled up with soil similar in all respects except compactness to the virgin soil upon which the foundation rested, and *in this soil and under the lime floor, without any exception whatever*, the remains when present were found.

The skulls so obtained were with one exception in so frail and crumbling a condition that it was found impossible to remove them, except in almost hopeless fragments; but by carefully saturating them with glue and cementing them together, they were restored to the condition in which they then appeared. (Specimens were exhibited.)

The ten towers examined were Drumbo, Trummery, Clones, Armoy, Drumlane, Rams' Island, Devenish, Island Mahee, Antrim, and Torry. Five of these towers contained human osseous remains; one had been previously disturbed; and four exhibited no trace whatever of any. At Trummery, a tower of comparatively recent erection, according to Dr. Petrie, the osseous remains were found in a carefully constructed stone chamber.

Of the eleven skulls discovered within the Round Towers, one was found at *Drumbo*; one at *Trummery*; six at *Clones*; two at *Armoy*; and one at *Drumlane*.

The whole collection (including crania from various other sources) was thrown into four chronological groups, viz. the Prehistoric, the Remote historic, the Anglo-Irish, and the Modern periods. The eleven crania from the round towers

were referred to the second or Remote historic group, which, from Dr. Petrie's researches, must belong to a period ranging between the fifth and thirteenth centuries. The tower of Drumbo not being of later erection than the sixth century, the cranium must have an antiquity of not less than twelve or thirteen hundred years. Drumlane tower being of nearly the same period, scarcely so old, its cranium therefore might be one thousand or eleven hundred years old.

The collection exhibited unquestionable evidence of the existence in Ireland at various epochs of strikingly contrasted varieties of the human family. But amongst the varieties of form attention was fixed upon one fact strongly shewn, viz. the tenacity with which different types preserved their identity through periods of time which embraced no small portion of the history of mankind.

The crania of the second group, viz. those found in the round towers, it was suggested, might possibly represent the *magnates of their day*. The construction of an elaborate stone chamber under the tower of Trummery would scarcely have been undertaken unless the individual had been a person of some importance, probably the immediate progenitor of the erector of the tower; yet, although the interment took place within the tower, it was not to be assumed that the towers were built for such a purpose. The decapitation of a slain chieftain, either by friendly or hostile hands, was a matter of ordinary occurrence. Now with the cranium from Armoy were found the three superior cervical vertebræ, *and no more*,—precisely so much of the spinal column as would remain attached to the head when separated from the trunk. Hence the inference was not unreasonable that it was removed from some fallen chieftain to rescue it from indignity, and, the tower in which it was found being probably then in the course of erection, was there interred, just as the head of Diarmid M'Fergus was buried at Clonmacnoise and his body at Connor, as recorded in the annals of the four masters A.D. 565.

A hope was expressed that the collection was but the commencement of one calculated some day to afford useful data to science; and the author concluded by expressing his own belief, that though these interesting relics of dim and distant

ages, and their congeners of more modern times, might present to the eye of the *ordinary observer* but few and barren facts, they would be found, nevertheless, when viewed through the medium of what appeared to some minds a deeper research and more exact knowledge, to stand forth, voiceless and unsuggestive as they seemed, enduring hieroglyphs of our race, pregnant with meaning of *hidden* but *grave* import, and not, perhaps, of very difficult decipherment.

○ MONDAY, September 6.

On the Forms of the Personal Pronouns of the Two First Persons in the Indian, European, Syro-Arabic, and Egyptian Languages. By the Rev. EDWARD HINCKS, D.D.

Dr. Hincks began by saying that he now only threw out suggestions, which might be followed up by others. The question, of which he took a novel view, could not be settled by considering the pronominal forms exclusively. Many other points would have to be considered; and whether the conclusions which appeared to him to follow with a high degree of probability from these forms would be confirmed or proved to be erroneous by the examination of other forms, was what he could not now say. He only wished to set persons to think. It appeared to him that a certain theory had been taken for granted, and he wished that it should be subjected to examination.

The affinity of the personal pronouns in all the Indo-European languages was not to be disputed; nor did Dr. Hincks mean to challenge any reasonable opinion respecting the absolute antiquity of the Sanskrit. What he called in question was its antiquity relative to the European languages akin to it. The case with respect to the pronouns of the two first persons might be briefly stated. The Asiatic members of this family have a final *am* which is wanting in the European numbers. Was this *am* omitted by the Europeans, or added by the Asiatics? The former is the received opinion; the latter seems more probable to Dr. Hincks. Examples of both processes are common. The English pronoun *we* is nearly the same with that in many languages of Northern Europe. It is admitted by all philologists that this has been shortened

from a more ancient form, *wir* or *wis*. This abbreviation has been made in Swedish within the Historic period. In other languages it was made in the Pre-historic period; that is, we have no written documents of an age before it was made. Philologists are, however, agreed that the *s* or *r* at the end of this form was an addition, and that there must have been an older form without it; and the received opinion is, that this form *wi* or *vi* was an abbreviation of the Sanskrit *viyam*. Dr. Hincks considered this to be a false view. He assumed a form *anwis* or *anus* (and that *wi* and *u* pass into one another appears from a vast number of instances; as the Latin termination *vis*, where the Greek and Sanskrit have *us*; the Semitic copulative conjunction, &c. &c.), from which *wis* and *nus* (*nos*) would both arise. This *anus* was the Semitic pronoun *anu*, which was common to the Indo-European and Semitic races before their separation, in the same manner as *anaku* and *anta* or *antu*; and the Indo-Europeans added *s* under a false impression that a plural termination was necessary, the fact being that *anu* was itself plural. As it is not likely that this mistake would be made simultaneously by unconnected nations, Dr. Hincks argued that the addition of *s* must have taken place while the Indo-Europeans were *one people*; and hence the necessity of assuming an ancient form which would account for both *weis* and *nos*. It was observed that *n* was peculiarly liable to be attached to words beginning with a vowel. The Irish names of Newry and of the river Nore, the English noun *newt*, in which the *n* has etymologically no place, and the abbreviations, *nan*, *ned*, *nol*, are proofs of this.

At first it was assumed that the pronoun of the first person singular in the European languages shewed traces of the Indian *am*. The *o* in *ego* might be for *om*, as the *o* in *lego* certainly was. A trace of this *o* remained in Slavonic, and its omission in Lithuanian and Gothic was evidently a degradation. Dr. Hincks maintained, however, that this *o* might be otherwise accounted for, the Assyrian form of the pronoun being *an-aku*. According to this view, the Indian pronouns *aham* and *viyam* are so far from being the original forms, that they are obtained from late European forms; not from the more ancient *aku* and *vis*, but from the abbreviated *ak* and *vi*.

If this philological view be correct, it tends to an ethnological view, which resembles what has been advanced by Dr. Latham. The Indo-European race proceeded westward through Asia Minor, and over the Hellespont and Bosphorus. They then dispersed through Europe, and at length an offset from the Slavonic branch returned to Asia between the Caspian and Black Seas, overrunning some countries eastward of Assyria, and at length penetrating to India.

The Semitic and Indo-European pronouns of the second person plural are distinct, having been developed in different manners after these races separated.

The Egyptian pronouns of all these persons take that *an* at their commencement which the Semitic pronouns of the first two persons have.

Heads of a Paper ^o "On the present state of Medo-Persic Philology. By PROFESSOR MACDOUALL, M.A., Queen's College, Belfast.

Tendencies have been lately exhibited, in works treating of Comparative Philology, to disturb, whether by contraction or by enlargement, the relations which profound research was supposed to have definitively settled between the Indo-European languages and those of other families, and also to question, on various points, the principles on which the present arrangement of the members composing the Indo-European class itself reposes. In particular, the position usually assigned to the Medo-Persic element has been assailed; and not merely has the registry of its functions and claims been thought to demand revision, but a disposition has been evinced to jostle it altogether out of its existing connection. Although it was not to have been expected that such theories as those formerly advocated by Othmar Frank on one side, and Col. Vans Kennedy on another, would be reproduced after the natural history of languages had been traced by Schlegel, Humboldt, and their coadjutors, yet that the present attitude of Medo-Persic philology is a retrograde one, might be inferred from such surmises as those which, having been propounded by an authority like Dr. Latham, drew upon him unmeasured censure in a recent number of the Edinburgh

Review. If it be not certain, after all, that the Irānian speech is cognate with the Sanskrita,—if it be still possible that the organization of any of its dialects may pass for Seriform,—then it is certainly high time that the notions generally current in reference to it should be reviewed, and, if requisite, corrected. A *resumé* of the progress already made may be useful as a preliminary to prospective steps in this direction.

The languages spoken by the subjects of the Achæmenian Kings—preserved through past ages on rocks, bricks, and slabs of stone, in the Cuneiform Inscriptions—are now partially resuscitated. One of these, generally known as “the third,” is admitted by all decipherers, with the (probably) solitary exception of Grotefend, to come under the Semitic category, like those of the Inscriptions of Assyria and Babylonia. The “second” type has not yet been so definitely classified: the designation at first given to it, “Pahlavi,” has been given up, and that of “Median” has been substituted provisionally; but, while some consider it Aramaic, others are at a loss whether to treat it as Arian or as Tūrānian,—and in either case disguised by foreign accessions,—or as a hybrid offspring, and one of uncertain parentage. Only the “first” of these monumental languages is admitted by all to be Arian, and by nearly all to represent the “Old Persic.” Not only its orthography, but its lexical and grammatical constitution, has been already to a great extent elucidated; and,—what it is here of importance to observe,—it has been shewn to resemble very closely the Old Sanskrita, —that of the *Vedas*.

Distinct from the languages just noticed, and likewise from each other, are those preserved in the Sacred Books of the Pārsis—whether those of the Sipāsī heretics, or those of the orthodox Zoroastrians or Mazdayaṇīs. It is true that not only the antiquity and genuineness of those books has been questioned by European criticism, but that the very languages, both of that oracle of the Sipāsīs—the *Dasūtīr*, and of those Zoroastrian books which are represented as the oldest and as the prototypes of the rest, have been regarded as fictitious products,—travesties of real but recent tongues, or else as mere gibberish. Whether, however, that in which the so-called

version of the *Dasūtīr* is composed represents the vernacular of Persia about the time of the Moslem conquest, or is some centuries later,—and whether that of the so-called original, the *Asmānī Zabān*, be such a fabrication as the *Balai-Bōlnā* of the Sūfīs or the Formosan of Psalmanazar; or after all be, as suggested by Von Hammer and Troyer, the relic of some old local dialect,—are points which, on the one hand, cannot be regarded as finally decided, and, on the other hand, do not furnish available *data* in the present inquiry. But it has come to be generally acknowledged, in respect to the Mazdayaṇian Books, that they in reality belong to three distinct epochs:—the originals being fragments of the revelations attributed to the undated Seer, Zarathustra;—the proximate versions or imitations of these, with some commentaries on them, being of the Sāsānian age;—and the versions of those versions, with other pieces founded upon and referring to them, coming down as far as—and in some instances even below—the era of Yazdajird. And the history of the three languages, in which these three classes of books are composed, requires now to be traced with the utmost attainable accuracy.

I. The *First* of them has been variously designated the Language of the "*Mānathar*" (= "Invocations"), or "of the *Avestā*" (= "Text, Discourse," or perhaps primarily "Appointment, Decree"), or "of the *Zend*" (= "Book," or perhaps "*Gnosis*, Science"), from the documents in which it has been preserved. The third of these names is the one most usually employed; though Spiegel and some other scholars have lately questioned its propriety, conceiving it to designate the more recent version, in an Aramaising idiom, which will be noticed under the next head. So long as this language could be studied only in the specimens exhibited by Anquetil Duperron, its character and rank were very imperfectly apprehended; but now that its genuine physiognomy has been portrayed by the happy ingenuity of Rask, its framework rebuilt and reanimated by the master-hand of Burnouf, and its relations elicited by the comprehensive analytics of Bopp, it has assumed its rightful stand-point as one of the primary members of the Indo-European family. As yet, however, opinions remain divided in reference to its original locality,—its growth, pro-

gress, and decline,—the age, authenticity, and mutual relations of its literary muniments. The idea of Anquetil, Kleuker, and Herder, that the Zend books were composed under Darius the son of Hystaspes and succeeding kings of the Achæmenian house, has been advocated by Adelung, Rask, Malcolm, and Klaproth: Wahl likewise concurred,—although he held that their language was merely a hieratic vehicle, gradually refined from the one in popular use by the sacerdotal caste: and the late Dr. Prichard adhered to the same chronology, without pronouncing decidedly for Wahl's theory, but evidently well inclined to it. Foucher and Tychsen, however, believed the groundwork of the liturgy to date from the reign of the Mede Cyaxares I., above 600 years B.C.; while they allowed that expositions of various parts, with additional prayers and tracts, composed under the Achæmenids, must have been incorporated with antique fragments in the existing compilation so lately as under the Sāsānian dynasty. Rhode and Heeren went still farther back, making the age of Zarathustra anterior to the Median empire; and this hypothesis has been stamped with the sanction of Burnouf, Lassen, and Pott.—For the locality of “the Zend-folk,” the older inquirers had pitched upon the north-west provinces of Irān, between the Caspian and Black Seas, and supposed the vocabulary to have been that of Northern Media: philological affinities were therefore sought, by Anquetil, Kleuker, and Wahl, in the subsisting dialects of Armenia and Georgia; but—more discreetly—by Klaproth and Rask in the speech of the Caucasian Irōn or Osī, whose descent from the old Medes had been traced through the Alans of the middle ages. An antagonist theory points to the north-eastern provinces, those bounded by the Caspian and Himālayan range; and, styling the speech of the *Avestā* “Sogdo-Bactrian,” makes it intermediate, as to local habitation not less than age, between the “Medo-Persic” of the Achæmenian Inscriptions and the Sanskrita of the *Vedas*. And this latter theory,—first suggested by Foucher and Tychsen, afterwards maintained by Rhode and Heeren,—is now commended by Burnouf, Lassen, Pott, Spiegel, and Westergaard; while Prichard, after a show of resistance, has virtually capitulated in its favour. The definite conclusions of Westergaard on other points have not yet been announced; but, in 1813, he

proposed to keep in view, throughout his forthcoming Grammar and Dictionary, certain ideas,—previously thrown out by Mr. Erskine of Bombay,—viz. that in the extant *rifacciamento* of the Pārsī books but a small *residuum* of the old Bactrian oracles can be detected, and that their language is in a condition of decrepitude and semi-barbarism. Col. Rawlinson, in different papers, oscillates between Erskine's notion and that of Wahl; but his latest statement, in 1846, is opposed to the belief that these books conserve any tongue which was spoken under the ancient monarchy. Finally, Spiegel's acute criticism has not only dissevered the relics of most hoar antiquity from the recent Sāsānian accessions,—has not only detached from both extremes various specimens of the literature which partially bridged over the wide gap between,—but has disparted the "Old Zend" itself into two distinct dialects, and referred to each of these such of the extant documents as exhibit their respective peculiarities. What if this distinction,—which Westergaard homologates,—was one of locality rather than of age? What if one half of the book *Yacna* was composed on the western or Median side of the Caspian Lake, and the other on its eastern or Bactrian border? If so, we may amicably close all controversy about "Media" or "Bactria," as the home of the Zend speech—which must thus have been "Medo-Bactrian," and as the cradle of the Zend people—in whose sagas the spiritual and secular powers were symbolised, respectively, by Zarathustra, the Seer born in Urumiā, and Vishtāspā, the monarch enthroned in Balkh.

II. Under the early Sāsānian kings the *First Book-language* had become obsolete, and the *Second*,—called by the Pārsis "the speech of *Huzvāresh*" (= "Auspicious Heroism," as it used to be rendered, or rather, as it is now understood, "Acceptable Sacrifice"),—became the hieratic vehicle. In this appeared both versions of the old revelations, and also some new works designed to facilitate the restoration of Magian worship, such as the *Virūf Nāmāh*, the *Bun-Dehesh*, the *Minō-Khirad*, the *Dīn-Kard*, &c. That any secular works were composed in it, or indeed existed at that epoch, there is no evidence. In it, however, are expressed the legends upon the fire-altar-coins struck by the early Sāsānids, and also the

vernacular portions of bilingual inscriptions upon various monuments at Naqsh-e-Rustam, Naqsh-e-Rajab, and Karmān-Shāh, belonging to the same period. This fact was discovered, as is well known, by the illustrious Silvestre de Sacy. The labours of successive numismatists and decipherers have gradually, though still but imperfectly, elicited the laws and characteristics of the language: they have been most clearly expounded in an essay of Joseph Müller, and the publications of Spiegel and Westergaard are now rendering them at once more definite and more widely known. All inquirers continue to agree that it is isolated, among the Arian kin-tongues, by a copious Aramaic infusion, neither inherited from its predecessor nor transmitted to its successor, which has imparted to it a hybrid and abnormal aspect, and which at the same time assures us that this is the "language of Zardusht" described by Abū'l-Farajī as an admixture of Old Persic with Nabathæan or Assyrio-Chaldaic. Now, these circumstances all harmonise with—if they do not absolutely require—the hypothesis, that the Huzvāresh speech must have originated in the western provinces of the empire, where the manifold intercourse of Arian and Semitic tribes would naturally produce a mongrel phraseology. While compatible with Anquetil's view of its being indigenous in Lower Media, in the region between Māzandarān and Farsistān, they rather favour that for which the cogent arguments of Erskine, Müller, Mohl, Lassen, and Knobel have secured a general reception, viz. that it was formed in the Border-land along the Tigris, including at first Khūzistān and Irāq-Ajamī, and subsequently also the northern districts about Hamadān and Kirmānshāh. They decisively preclude the fancy of Quatremère and Pott, that this language was vernacular east of the Caspian, among the Parthians,—was successfully propagated towards the west and south by the dominant Arsacids,—and only relapsed into obscurity after several reigns of the native Sāsānians. For, in this case, it should have been distinguished by a Tūrānian, not an Aramaic, infusion; its monumental inscriptions should have been found to the east, not the west, of the Great Salt Desert; its coin-legends should have belonged to the "Phil-hellenic" Arsacids,—whose mintage, however, is purely Grecian,—not to their

Sāsānian successors, whose policy would naturally have discouraged its use. Equally inadmissible is the idea of Anquetil and his immediate followers, that this dialect so early and so extensively encroached upon the domains of others, as to have been adopted, under the Kaiānian dynasty as the speech of the court and the empire, and to have maintained that rank at least 900 years, including the most brilliant and palmy period of Persian ascendancy, and reaching down almost to the Moslem invasion. It is sufficient to remark,—without mentioning the historical and geographical difficulties which hence arise,—first, that it is not *this* language which supplies the words adduced by Greek and Latin writers as exemplifying the classical Persic of their day; and, secondly, that *its* structure does not accord with the intimations of Firdausī, Nizāmī, and other Moslem authors, that the speech of the ancient monarchy had survived the revolution, and had come down to themselves so far exempt from any material change, that they had no difficulty in consulting the chronicles preserved in it.

III. In respect to the *Third* Book-language, the prevalent—and, as would appear, well-founded—belief now is, that *it* was the one referred to by Firdausī and Nizāmī; that it had been the vernacular idiom of Farsistān, which, under the later kings of the Sāsānian line, became fashionable and literary; that it ranked as the *Darī* or “Court-speech” during two centuries, but shrank into the obscurity of a book-language after A.D. 641, when it ceded its title of *Darī* by resisting that influx of Arabic terms and phrases which began thenceforward to colour the vehicle of ordinary conversation and business. Its analytical character, intermediate between the still complex—though doubtless partially relaxed—tissue of Huzvāresh and the consummated disintegration of Neo-Persic, warrants the philological soundness of this belief. Its name, “*Pārsī*,” at once recalls its original locality, and identifies it as the distant descendant of the language which occupies the first place in the Achæmenian Inscriptions—although, of course, the resemblance between these two has been seriously impaired by diversified influences in the wide chasm of time by which they are separated. Since in it various holy Oracles were

translated from Huzvāresh,—if not, in rare cases, even from the older hieratic tongue,—and since expositions and devotional pieces by revered Möbeds were preserved in it by those who adhered to the old faith after the triumph of Islām,—it is now found to be largely saturated with the spirit of those uncongenial idioms, especially the latter of them, with which it was in more immediate contact. Hence, too, it has been designated the speech of “*Pā-Zend*” = “the Commentary,” and of “*Buzurgān-e-Dīn*” = “the Doctors of Religion.” But though the literary memorials now extant in it are, probably without exception, religious, others, now lost, are recorded to have been composed in it on secular subjects; such as the *Zafar-Nāmah* = “Book of Victory,” by Būzūr, the Vazīr of Nūshirvān; the far older *Kār-Nāmah* = “Journal,” of uncertain authorship; and a work on Morals by Ardshīr, Bābagān. Further, it must be this same Pārsī, or Old Dārī which Mohammedan writers term “*Pahlavī*,” while stating that in it, under the patronage of Nūshirvān and his successors, were composed the *Bāstān-Nāmah* = “Old Hero-book,” and also sundry versions as well of Sanskrita collections of apologues as of treatises by Plato and Aristoteles.

Although, in the present abstract of a long paper,* the disputed appellations *Avestā*, *Zend*, *Dārī*, have been passed without discussion, yet it is necessary concisely to review the history and circumscribe the import of the name just mentioned, —*Pahlavī*,—because it has been bandied about, in reference to unconnected and alien objects, with such latitude as to have involved the whole field of Medo-Persic philology in a perplexity truly tantalizing.

From the time of Hyde and Anquetil, European writers, with the sanction and concurrence (as would appear) of the Pārsīs themselves, have designated the *Second* Book-language “*Pahlavī*.” And, in accordance with the different views which they have taken of the origin and history of that language, they have espoused different derivations of this name.

* In it the latter “*Dārī phasis*” of the language, the modern *Pārsī*, and various Arian dialects pure and mixed, were also reviewed, but not in a way that readily admits condensation or abridgement.

Some have deduced it from *pahlū* = "vigour," or *pahlau* = "strong hero," as if it were strictly synonymous with *Hu-zvāresh* (according to the etymology put upon the latter term until lately), and representative of the speech in which the *Pahlā wān-e-Jahān*—those Paladins who upheld Irān, while its sway was most extended—embodied their conceptions; others from *Pahlava*, as applied to the Parthian tribes, or from *Pehlev* as indicating the old battle-ground of Rustam and Afrāsīāb; others, from *Pahlū*, as restricted to the Border-land between the purely Persian and the Arabo-Chaldaic territories. But *Pahlavī* is defined by some Moslem authorities as simply = "ancient *Pārsī*;" and by all of them this is employed as the ordinary designation of the tongue which they describe as having been the national one down to the Saracen conquest, or even later. Numerous words noticed by Firdausī as *Pahlavī* are purely Irānian, not of Semitic parentage, as many of them at least must have been, if really *Huzvāresh*; and it has been observed, likewise, that the poet commutes *Pahlavī* and *Pārsī* as epithets distinctive of his own phrasology. The truth then is, that, in Moslem usage, *Pahlavī* suggests the *Third Book-language*—the one above discussed under the titles *Pā-Zend* and *Pārsī*; occasionally comprehending also the *Darī*, in which the third language came to be absorbed; just as the names *Darī* and *Pārsī* likewise have been sometimes treated as interchangeable. Before this state of the case was clearly demonstrated by Joseph Müller, the name *Pahlavī* had been construed, in *all* Oriental works alike, as referring to *one* language, and that the *Huzvāresh*; but the unhappy result had been the perpetuation of such philological and historical hypotheses, incongruous and untenable alike, as have previously passed under our review.

Since, now, the name in question has been ascertained to denote, in one set of writers, the *Second Book-language*—one strongly tinged with Aramaism, but, in another set, the *Third Book-language*—one of more purely Iranian organisation, it may be inquired, whether either of its applications favour any of the three etymologies, which, as was above mentioned, have been proposed for it, or rather a fourth must be resorted to for it in one or other—or both—of those applications. Now, a

retrospect at the conditions of the problem evinces that two of the etyma must be summarily set aside. The third, viz. *Pahlū*="Border-land," is suitable to *Pahlavī* as denoting the hybrid speech of Khūzistān; but, manifestly, it is not at all appropriate in reference to the language of Farsistān and Kōhistāu, of which the Darī employed by Tabarī and Firdausī was the offspring; and hence it becomes desirable to find one which may lie at the root of and explain both applications. Various reasons recommend *pahalam* = *par' uwam* = *parum*, &c., a word which means both "excellent" and "ancient," and which, moreover—what it is especially important to observe—is sometimes contrasted in usage with the later "*Parsi*," and synonymous with "*Zabān-e-Bāstānī*"="the ancient tongue." It will thus appear probable, that the *Pahlavas* and *Pahlawān* are so designated as being "the ancient tribe," and the *Pahlavī* as being "the ancient speech." If so, one may collate the *Pelasgoi* and the *Graioi* or *Græci* in relation to the *Hellēnes*, as also the *Prisci* and the *Casci* in relation to the *Latini*! and this, whether or not "ancient" be likewise the radical sense of—that much-tortured appellative—*Pelasgoi*, as well as of *Casci*, of *Prisci*=*pristini*, and of *Graioi*—an abridgement of *geraioi* which is illustrated by *graia* and *graus*. It were needless to embarrass this analogy by suggesting further, that *Pelasgoi*,—if strengthened from *Pelagoi*, a sister-form of *Pclaioi*,—might not even serve as an etymological link between *Prisci* (coll. *prius*, *primum*, *prin*, *paros*, *perusi*, *palai*, &c.) and *Pahlava* or *Palhava*, through a series of letter-changes, which separately would be easy, although cumulatively they might appear improbable.

o Tuesday, September 7.

The Origin, Characteristics, and Dialect of the People in the Counties of Down and Antrim. By the Rev. A. HUME, D.C.L. LL.D. F.S.A.

The district comprising the counties of Down and Antrim of which Belfast is the natural centre, is one which has exercised a most important influence on the destinies of the human race in these islands. In Down, the patron saint made his

first convert, and there his ashes repose; in Antrim the real Ossianic poems are supposed to have existed. In Down was the ancient Ulidia, from which the extended name Ulster is derived; in Antrim was the ancient Dalradia, the name of which was applied to a large portion of modern Scotland. Ireland was originally known as Scotia, or Scotia Major; and when the name was superseded at home, it was retained by our enterprising colonists to Argyle and Lorn, and afterwards extended to all North Britain, after the conquest by Kenneth in the ninth century. The line of kings descended from Fergus the son of Erc not only mingled its blood with the Saxon and Norman royal lines of England, but afterwards inherited the sovereignty of Great Britain; so that Queen Victoria traces an authentic descent from the petty chieftains of this neighbourhood in the fifth century.

More than a thousand years afterwards the debt of colonization was repaid, at the time of the Plantation of Ulster. The Anglo-Saxon population had been so long separated into two branches, the English and Scotch—differing in country, laws, religion, manners, prejudices—that they must be regarded as two peoples, and not one. If to these we add the remnant of the native Irish, there are three distinct elements, from the composition of which, in different quantities and situations, the inhabitants of the two counties are derived.

These localities are the following:—the Irish, in the hilly districts, as in the “Glynnes” [glens] of Antrim; and the Irish-speaking population in the neighbourhood of Cushendall. There are a few in almost every parish, and several in the great towns. In Down, few occur north of Downpatrick and Ballynahinch; they then converge to the mountains of Mourne, by the parish of Loughin-island. In the past generation, Irish was frequently spoken in the markets of Downpatrick, Castletown, Dromara, and Ballynahinch; now it is rarely used as a separate mode of communication. In the districts of the Celts they preserve their traditional antipathies, though they assimilate in language; and the terms “Irish,” “Scotch,” and “English,” are used currently by the nearest neighbours in reference to ancestral origin.

The Scottish immigration followed two natural routes—by

the Mull of Cantyre to the County Antrim, near the Causeway; and by the Mull of Galloway to the County Down, by Donaghadee. From the earliest time, coracle, skiff, and coaster must have passed in this way, and the two distinct streams ran right across the counties. In Down, the Scotch current is traceable by Comber, Killileagh, Saintfield, and Annahilt, nearly to Hillsborough; also by Castlereagh and Purdysburn, to near Belfast. In the County Antrim the course is by Ballymoney and Ballymena, up to the town of Antrim, and over the back of Devis and the Cave-hill.

The English settlers occupied mainly the low countries, such as the basins of the Lagan and Bann, and the banks of Lough Neagh. Belfast was originally an English town, but its external increase has been mainly from the two Scottish districts. Lisburn was a small English and Welsh colony: it is now practically an English town. In one barony of Antrim, of 128 townlands the population is all of English origin; and Aghalee, Ballinderry, &c., look like parts of England.

At various points the different races meet, but refuse to mingle. There are English, Irish, and Scotch quarters in several towns, such as Downpatrick and Carrickfergus; and the Lagan, near Lisburn, separates the two races. In one half of the parish of Hillsborough the people are all Scotch, in the other they are all English. A hill near Ballynahinch separates the two races; and the island of Rathlin has its two promontories occupied, one by the Irish, the other by the English and Scotch.

The religion, habits, customs, &c., may all be deduced from this distribution. In religion, for instance, the rule is, that the English are Episcopalians; the Scotch, Presbyterians; and the Irish, Roman Catholics. The lines of Scottish population may be marked on the map by a double chain of Presbyterian meeting-houses, while in the English districts they are rare or unknown. In fourteen Presbyteries of the General Assembly, seven of which are in each county, there are upwards of 200 congregations. If to these we add other Presbyterian congregations not connected with the Assembly we shall find that fully one-half of all the congregations in

Ireland are situated in these two counties, or connected with Presbyteries that centralize in them. More than one-half of these are in rural districts, unconnected with towns or villages, and called by the names of townlands ; shewing that the Scotch were in general agriculturists, and less settled in towns than the English. In the English districts the church-and-king feeling is strong ; but, from the magnitude of the parishes and the distance of churches from particular points, the people are less attentive than they should be to their religious duties. In the Irish districts the Roman-Catholic congregations are large, and those of the two branches of the Protestant Church are small. In the English and Scotch districts several parishes are united to form one in the Roman-Catholic arrangements ; and again, Drumgooland, where Protestants are few in number, is divided into two Roman-Catholic parishes. This is in the neighbourhood of Dolly's Brae, and it is said that in two townlands of Backaderry and Magheramayo, as well as in several others, there are scarcely any Protestant families.

The habits of the people, as well as of their creed, indicate their origin. In the English districts there is more comfort and tidiness than we find elsewhere ; for the man of Scottish ancestry does not enjoy life so well, though he may be actually richer. The Scotchman is often more intelligent than his English neighbour, but he rarely excels him in weight of character. In the English districts the farms are large, and there is a better kind of house, furniture, stock, food, clothing, &c. The man of English origin will live and let live. In the markets of Lurgan, Lisburn, Moira, and Portadown, the Down farmer is known from the Antrim one, or rather the Scotchman from the English, by his hardness in driving a bargain. The old English sports and pastimes were kept up till recently at Lambeg ; the May-pole is still known in Holywood ; and tradition leads us to believe that certain mystery plays have been performed in the district. The custom of hiring servants at stated fairs is followed in Antrim, as is the case in many other towns and places of England ; and while those who attend for the purpose at Carlisle carry a straw in the mouth, those at Antrim carry a little white rod in the hand. The settlers on the Marquis of Hertford's estate were in

general natives of the shires adjoining the Bristol Channel; and as their ancestral district is the apple district of England, so the barony of Upper Massareene is the apple district of Ireland. After the lapse of 250 years, the ancient custom is preserved as if it were of yesterday. The superstitions of May-eve and Hallow-e'en are still practised, and not one of the ceremonies in Burns' poem is neglected, even by those to whom the poem is utterly unknown.

✓ The names of persons and of places are also highly illustrative of the people. In the English districts we meet with such names as Turner, Standfield, Hull, Moore, Shields; in the Scottish, Dunbar, Edgar, Livingstone, Kennedy, Douglas, and sometimes they undergo curious transformations. In the Irish districts a few names are used with distinctive terms and epithets, and sometimes Irish names are translated into English or Anglicised; M'Shane becomes Johnston, and Ginnif, Sands, while M'Gurnaghan is altered to the more euphonious Gordon. ✓ Names of places are often derived from those of persons, as Hill-town, Hill-hall, and Hills-borough, from the Downshire family; Gill-hall and Gilford from the M'Gills; and similarly Warings-town, Ross-trevor, Echlinville, Mount-stewart. Groom's-port is Graeme's-port, and Ballymcarrett the village of M'Art. Many names are less distinctly known, as Bryan's-ford, Lyle-hill, Randal's-town; others allude to the original possessors, as Acre M'Cricket, Taggart's-land, Douglas-land, Dobbin's-land, Bally-copeland, Bally-french, Bally-gilbert..

Dr. Hume concluded his remarks with a *viva voce* description of the Hyberno-English dialect in these two counties, and shewed, by various quotations, its local characteristics, and also its usefulness. From the fusion of many peculiarities and the mingling of provincialisms from various parts of the United Kingdom, it is particularly useful in the illustration of our old English literature.

9

On the Misapplication of the terms Evolution and Development, as applied by Ethnological Philologists to the Inflexions of a Language. By RICHARD CULL, Fellow and Hon. Sec. of the Ethnological Society.

This paper is more of a critical character than fraught with new facts, as indeed its title conveys. Philologists speak of a language developing its inflexions, or having its inflexions evolved. It appears to the author that Horne Tooke clearly pointed out the nature of the inflexions of languages; that the researches of all philologists have confirmed his view; and yet we continue to speak of evolving inflexions. Many persons attribute a vast mental superiority, at least in language, to certain nations of antiquity, for having developed inflexions in their language; and deem the descendants of those same nations to be inferior, because they have not only not developed any inflexions, but have been unable to maintain those which were developed by their ancestors. If the views of Horne Tooke be sound, the idea of developing, in the sense of opening or unfolding, is erroneous.

A change in the form of a word to express a different meaning is called an inflexion. The form of a word can be changed in two ways—

1. By adding one or more sounds, or even syllables, to it, as *love*, *loved*, *loving*.

2. By a change in the word, as *speak*, *spoke*: and both methods of changing the form may occur in the same word, as *speak*, *spoken*.

The word *loved* differs both in form and sense from the word *love*. The word *spoke* also differs in both respects from the word *speak*. And the word *spoken* differs in both respects from *speak*.

What is expressed in one language by such a change, called an inflexion, may be expressed in another by a different method; thus, the Latin *dominus*, "a lord," besides its other changes of form, has one which gives it a feminine signification, *domina*, "a lady"; but the English word "lord" has no feminine inflexion. Thus, while in Latin a part of the word only is changed, in English another word is adopted. The

word "lady" is not an inflexion of the word "lord." Languages differ greatly in regard to inflexion: some abound in inflexions, while others have but few. They are numerous in Sanscrit, Greek, Latin, and the Slavonic languages, less so in English, and at the lowest in Chinese.

We know how these inflexions were produced. They are not produced by any opening, as a bud opens into a flower, but by the coalescence of another word, or fragment of a word, with the original word.

We can shew in many languages the word whose fragment is coalesced. Now, a junction of two things, even when well incorporated together, cannot with propriety be called a development or evolution.

In the Hebrew language the personal pronouns are termed separable and inseparable. The separable pronouns represent the person to be in the nominative case. The inseparable exhibit only some fragment of the separable pronoun combined with some word.

In the Malay the plural is formed by adding some word or words which signify *much*, *many*, or the like, or by repeating the same word, as *oran baniak* or *oran oran*, "many man," or "man-man."

In the Coptic the syllable *ni* or *na*, which is prefixed to form the plural, is, no doubt, says Professor Lee, the word *na* or *naa*, which means "much, many, or great." In Lee's Hebrew Grammar the subject of the coalescence of words with fragments of other words is treated in a masterly manner.

If we study human speech for ourselves, by closely observing what is going on, instead of merely reading books on the subject of grammar, we shall detect the process by which inflexions are formed. The formation of inflexions, like other changes in language, are not the result of a committee of learned men sitting in solemn council. There is no deliberation whatever in the matter. Learned men and grammarians do not make the changes. They only observe and record the changes that are taking place in the language of the mass of the people; and all these changes are made in the spoken language.

The two objects of language are—

1. To convey ideas, &c.
2. To do so rapidly.

In our common speech we are ever striving to convey our thoughts with rapidity, and in our efforts to do so we involuntarily abbreviate many words, and join those abbreviations or verbal fragments to other words. In this way we economise sounds, syllables, and sometimes words. The word *them* is commonly imperfectly uttered in the rapidity of familiar discourse. It is abbreviated by cutting off the *theta* in such phrases as, *I gave 'em* instead of *I gave them*. This was observed above a century ago, when an attempt was made to render the written language a transcript of the spoken by printing the abbreviation *'em* for *them*. The first edition of Lord Shaftesbury's *Characteristics* was so printed.

Again, in familiar talk we say *I aint* for *I am not*; *I wont* for *I will not*; *I shant* for *I shall not*. These examples, so far from being exhaustive, are merely instances from groups of such abbreviations. The act of subordinating an auxiliary verb to the principal verb of a sentence seems to crush the auxiliary into a mere fragment, as in the sentence *I have done*, which is in rapid talk broken down into *I've done*. Such cases illustrate the formation of an inflexion, and is what is passing under our daily observation. A number of reasons prevent the transfer of these colloquialisms from being transferred to writing, but no one who has studied the subject will doubt, that if our language were an unwritten one, and now about to become a written one, such forms of inflexion would be noted and written as a part of the language.

The author has observed similar phenomena in several European languages. Hence the causes that produce such phenomena in our own language are also operating with similar results in certain other living languages, and it is to such causes alone that we can refer the formation of inflexions in the Hebrew and other ancient languages. The formation of inflexions, then, is not by developing something out of a word, but by adding something to that word.

*Remarks on an Ethnological Collection, in illustration of the
Ethnology of Java.* By Dr. BIALLOBLOTZKI.

Notes on Blumenbach's Classification of the Human Race.
By RICHARD CULL, Fellow and Hon. Sec. of the
Ethnological Society.

The following delegates represented the Ethnological
Society.

JOSEPH MOORE, M.D.
F. HINDMARSH, F.G.S., and
RICHARD CULL, *Hon. Sec.*

COMMUNICATIONS RESPECTING THE CASSIA TRIBE,

By T. OLDHAM, Esq., F.G.S., GEOLOGIST TO THE INDIAN SURVEY.

Extracted from a Letter to Dr. R. G. LATHAM, dated Calcutta, 29th April 1852.

Read 10th November, 1852.

LAST summer we spent in the hills north of Sylhet, amongst the tribes called the Kassia, Cossia, or Khasiya, for it is indifferently spelt in all these ways.

To one remark of yours, tending to identify or approximate the Kassias and other Aracanese tribes, I must say Nay. You say (p. 32 "The Varieties of Man")—"In the Kasia country the occurrence of erect pillars, evidently objects of mysterious respect, if not of adoration, is frequent. They are explained by similar ones in the Khyen district. They are de-
scribed by Lieutenant Latter—*accurate magis quam verecunde*—and are lingams."

Now there is not a single stone even remotely representing the organs of generation among the Kassias; nor are they, as far as I can discover, at all disposed to pay any respect to such embodiments of the generative principle. Their religion is obscure. The principal portion of it consists in the adoration of *Boots*, or Spirits, which they believe to dwell in, and to possess, trees, stones, rivers, &c. To these they offer chiefly lime, one of the condiments they eat with pawn, simply smearing it on the trees or stones as they pass. Thus you will see a large stone, by the very side of some large projecting mass of rock, (whose overhanging shade may have instilled feelings of gratitude for the protection it afforded, or whose dark and gloomy loneliness may have inspired feelings of awe,) covered with these white finger marks, crossing and re-crossing it in every direction.

I have frequently seen my men make this offering, if offering it can be called, for they appeared to me generally to make the tree or rock serve the same purpose as a napkin

would with a civilized Christian, to wipe their fingers on, after they had taken good care to help themselves to the best portion of the lime; but I cannot say that I ever saw them repeating any form of prayer, or otherwise offering any adoration.

They have some indistinct notion of a Supreme Power, and of future punishments and rewards. Their heaven is a place where pawn is abundant, and lime and betel-root easily to be obtained. Their hell is an abode of the damned, in which they suppose the wicked are placed, immersed up to their arm-pits in human ordure. These punishments are not, however, supposed to be eternal, but a man passing through this purgatory may attain to the happy region, or those above may be plunged into the filth as a punishment for deeds done after death.

But although they reverence and even worship rocks in this way, these rocks must not in any way be confounded with the standing stones to which you refer. Those to which adoration is paid are invariably *natural*, the others invariably erected by man. The latter, though not truly sepulchral, are, in all cases, *monumental*;—In the case of wealthy persons, put up to the honour and name of a single person; with persons less wealthy, put up by a family (unitedly) to the honour and name of their ancestors “departed this life.”

They are essentially of two kinds, for which they have distinct names,—one a monument of three standing stones, the other of five. These are often combined, and thus rows of 6, 8, 10, 11, 13, 14, 16, &c., stones are formed, these rows being made up of separate monuments of different numbers.

The stones are generally flat slabs of considerable size, and vary much in their form, dependent on the locality in which they occur, and the rocks to be found there. Where the rock is sandstone they are generally well cut and squared; where of slaty rock or granite they are rude unhewn pillars. In front of these standing pillars is a cromlech-like erection, consisting of a flat stone or stones, supported on small upright ones. These form the general resting-places of the people as they pass along, and are, for the most part, on or close to the

lines of road through the hills ; indeed, I may say invariably so ; as, where they do not appear so at present, it arises from the line of road having been changed by the removal of a village, &c.

The Kassias, as you mention, do not drink milk, though they keep large herds of cattle for the sake of their manure : they eat the beef. Pig is, however, their favourite meat ; and pigs are sacrificed at every feast or festival. I could not trace that they had any fixed days for feasts, any holy days, which are so amazingly numerous among the Bengalees. They do not distil, but make a large quantity of fermented liquors, and delight in getting *mellow*. They are great *gamblers*, few of their villages being without regular houses specially devoted to this purpose.

The children of the parent never inherit, the nephew being invariably the heir—that is, the sister's child ; and the husband invariably leaves his home and his village, and goes to reside with the wife in her village. The marriage ceremony is very simple, and readily performed : the divorce is equally facile. In fact, the man walks away, and the wife is at liberty to take unto herself another husband. There is a less amount of immorality than among the Bengalees. The Kassias burn their dead, preserving the bones and ashes, and these are sometimes (when the family is wealthy) burned a second or even a third time, each occasion being an excuse for a great feast and gathering. Their dances are confined to these occasions, as far as I could learn, and are really very curious and interesting. They wear a peculiar dress, never usual at any other time, occasionally highly ornamental and very expensive, are decorated with silver embroidery, and gold chains, &c., and little embroidered tunics of velvet or silk, of various colours. The dance itself, as far as the motion is concerned, is very monotonous, and the music equally so. A curious fact connected with this, and which, as yet, I cannot account for, is this, that they have the most perfect jig and reel tunes I ever listened to out of Ireland and Scotland,—the most lively, inspiriting airs, with the same wild changes which a Scotch reel has, from the true reel to the strathspey,—but to these airs they never dance. Whence came this music ?

It is altogether, in its spirit and character, distinct from the true Indian airs, and equally so from the monotonous dance music of the Kassias themselves, or the wild but melodious airs which they sing. There are many other points of interest about them, to which, however, I have not now time to refer; but, if you think it worth while, I will send you a more detailed statement.

The language, however, is the best clue to their position ethnologically; and as this may enable you to fix some main points regarding their position, I have got together a vocabulary containing a good many words. I am not aware of any published vocabulary of the Kassia, at least of any extent. I have about 500 words already; but as, while I am writing, it has become more than probable that I shall return to the Kassia hills this summer, I shall not copy these for you at present, but send you the full list at another time. I here give you their numerals. The system is a decimal one.

1. Kanee.*	11. Kud owè.
2. Ash.	12. „ ash.
3. Laee.	13. „ laee.
4. Sowh.	14. „ sowh.
5. Sungh.	15. „ sungh.
6. Heureeoo.	16. „ heureeoo.
7. Henneeow.	17. „ henneeow.
8. Phràh.	18. „ phràh.
9. Kundaee.	19. „ kundaee.
10. Sheepow	20. Ash phan.
30. Laee phan.	
40. Sauh phan.	
50. Sungh phan, &c.	
100. Shee spah.	
200. Ash spah.	
300. Laee spah, &c.	
1000. Shee pan spah.	

* I think there is some mistake in making *kanee* = one, as the system is decimal, and eleven = ten one (*kud owè*), the word *owè* is one. There may, however, be two words for "one," viz. *kanee* and *owè*. Is the word *shee* another synonym for "one"? See the numbers ten and one hundred R. C., *Hon. Sec.*

As far as careful inquiries would satisfy me I was perfectly satisfied of the monosyllabic character of the language. Last year, however, being fresh in the country, I could not speak the language; and being always obliged to converse with the Cassias through the medium of the Hindostanee, I was not able to get as much information from them as I could have done under other circumstances. I shall be better off this year, and shall endeavour to correct any mistakes, and to add to my stock of words and phrases. I cannot help thinking, however, that you will find the *Garó* tribe much more nearly allied to the Kassias, Kukis, Kachari, and Manipuri, than with the Bodo or Dhimal.

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OBSERVATIONS
ON THE
REPORTED INCOMPETENCY OF THE "GINS"
OR
ABORIGINAL FEMALES OF NEW HOLLAND,
TO PROGREATE WITH A NATIVE MALE AFTER HAVING BORNE
HALF-CASTE CHILDREN TO A EUROPEAN OR WHITE.

By T. R. H. THOMSON, M.D., Surgeon R.N., formerly of the
"Niger Expedition."

Read November 10th, 1852.

Few statements were ever received with greater astonishment by ethnologists and physiologists than one made by Count Strzlecki, some years ago, in a work published by him on the physical history of New South Wales, to the effect that once a female of the aboriginal race has borne a child to a European or white, she ceases entirely to reproduce with males of her own race, or, in other words, is henceforth infecundate to all except the former.

A statement so utterly inconsistent with all the known facts connected with the history of the human species induced me, during a sojourn in New South Wales in 1849, to make very particular inquiries, both from natives and settlers of acknowledged veracity and observation, as to the tenability of this extraordinary assertion; but while I am obliged to say that all I could ascertain was quite inconsistent with it, I must also admit the deep research and general accuracy of the learned traveller from whom it emanated. On informing some of the Wyong natives and others of Hunter River that this to-be-acquired sterility of their "gins" had been reported, they all regarded it with derision, assuring me they had known it to occur repeatedly in their own and other tribes for native women to bear children to their black husbands or companions, after having borne offspring to Europeans; which affirmation they accompanied with remarks in

the peculiar jargon used by them in communicating with the white man, neither complimentary to the distinguished individual whose name was connected with it, or my humble self who repeated it. Mr. Coulson, also, whose knowledge of the Moreton-Bay blacks is very considerable, expressed much astonishment on hearing it, and likewise informed me he had known many cases among the King-Bar tribes, the Lady Plains, and Logan tribes, where the gins, or native women, had borne perfectly black children to native males, after having cohabited with and produced half-caste children by European squatters or settlers. This was also confirmed by other respectable settlers, some of whom, out of respect to Count Strzlecki, did not wish to have their names mentioned, but who altogether repudiated what had been said on the subject by that traveller.

There is now residing here (near Douglas, Isle of Man) an intelligent settler, Mr. Hay, who recently returned from Australia, after living fourteen years near several of the Macquarrie-River tribes, and he, too, informs me that the statement in question is quite erroneous, and could only have been imposed on its author by some ill-informed persons; for that a black gin, or female, at his station on the Macquarrie River, about 250 miles from Sidney, had a copper-coloured child by a European servant of a neighbouring station, and she afterwards returned to her own husband and tribe, and had a perfectly black child, without any European trace; and Mr. Hay saw the mother at his station just before he left there, not more than eight months ago, and with her the elder or copper-coloured child, and the younger or thoroughbred Australian. He says further, that he could have no difficulty in adding several other similar cases, but such "a startling fact" had not reached him while in New South Wales, or he would have collected abundance of evidence to refute it.

That the native women, or gins, should sometimes become sterile after a period of concubinage with a European is not denied by me; nor is such to be wondered at, when we take into consideration the change of life which follows on a gin placing herself under the roof of a European settler.

From living in a state of nature, with irregular and uncertain diet, exposed to every vicissitude of climate with no other covering than a scrap of opossum skin, or a little "tulka," or tea-tree bark, she enters on a more regular life, partakes of regular meals, and sleeps no longer exposed; but even with all these alterations for the better she does not bear to the white man more prolifically than she would to her native husband: on the contrary, her fecundity appears to decrease; for, in partaking of the white man's comforts, she is too often the recipient of his vices. Much of her time is passed in smoking tobacco and drinking to intoxication ardent spirits, where they are procurable. Indeed, it is well known that one of the chief inducements for the native women to remain with Europeans is the rum with which they are supplied *ad libitum*. Can we, then, be surprised, if, after some years spent in a manner which must militate more against her capabilities for procreating than her previous mode of life, she returns to her tribe with a broken-down constitution, probably past the usual term of life for conception (as they seldom bear children after thirty), to prove, in some instances, sterile. We readily admit, that wherever our settlers are commingled with the Aborigines in the bush, the native race disappears, and partly from the infecundity of the gins: this, however, does not arise from any deviation of nature's laws, as it is attempted to be proved, but because the European, wherever he takes his civilization, takes with him his vices also; and the enervated, miserable Aborigines (scarcely ever sober), noticed by the traveller too commonly around the settlements in the bush, afford tolerably good evidence of the causes of decline in the native tribes. The further they are in the bush the longer they hold their ground: the nearer the town and the grog-shop, the quicker they are swept off.

Small-pox, too, has lent its aid, in many tribes, to extinguish them, under the name of "Dunna-dunna." Mr. Hay met with it among some of the Macquarrie-River natives, and some retained unequivocal marks of its having visited them, although it has been denied by some writers.

Another sad cause of their gradual extinction is the disposition on the part of the gins to get rid of the trouble of

ending and carrying about their offspring, and which is now too frequently done by destroying them. A native woman, knowing it will please her European keeper to preserve the fruits of their intercourse, will do so, as her duties are light; but on leaving the white man, and joining her tribe, should she become pregnant by a native, will she (harshly used, indifferently fed, and obliged to travel about hunting and fishing at the caprice of her companions) trouble herself much about her helpless burden? It is not to be expected she will; and every inquiry now proves that one great cause of extermination is infanticide.

As well might Count Strzlecki, or any other authority, refer to the cause he assigns for it in Australia the gradual disappearance of some of the South-American tribes after Pizarro's invasion, or of the North-American tribes since the United States has sent her pioneers into the far West, as to do so in the case of the Aborigines of New South Wales.

We all know that many tribes of both North and South-American Indians are extinct, and that, in the gradual disappearance of such races, there is a degree of infecundity connected with their decline, and with the advances of civilized life into their distant prairies; but it resulted not from any deviation to nature's laws, such as Count Strzlecki offers; it was by the diseases, the altered habits, the enervating and depraving vices which the white man takes with him when he goes forth to seek a new home in the land of savages.

That the various races of mankind can commingle and procreate without losing the capability of reproducing again with their peculiar division of the human species, is abundantly proven wherever the European has turned his steps. Let it be North or South America, India, Africa, Japan, China, Polynesia—the traveller will find the half-caste, the mulatto, the creole, too often the elder brother of the jet black, the brown, the olive, unmixed younger children, to confirm what is now asserted confidently to hold good of the Aborigines of New Holland.

T. R. H. THOMSON.

1, *Mona Terrace, Douglas, Isle of Man,*
June 3, 1851.

ON THE
PHONOLOGY AND ORTHOGRAPHY
 OF THE
ZULU LANGUAGE, AND ITS KINDRED DIALECTS.

BY THE Rev. LEWIS GROUT.

Read 8th December 1852.

THE American Mission at Natal issued a Circular Address, more than a year since, to the Missionaries and friends of education in Africa, urging the importance of an attempt to secure a uniform orthography for all the cognate African tongues, and proposed a plan by which it might be effected.

In accordance with that plan, the Committee of the said Mission on orthography will now attempt to furnish such an account of the phonology and orthography of the Zulu and its contiguous dialects, as shall enable the general and ultimate Committee, to whom the whole subject may be referred, to judge of the character and necessities of these dialects, and provide for them in connection with other African dialects, for which they may be desired, and may have the goodness to recommend a general and uniform orthographical system.

But before proceeding at once to the phonology of the language, it may not be improper to allude briefly to the origin and present state of the measure here proposed, and to notice one or two facts and considerations which such a review may present.

The American Mission had felt for some time that the orthography used for the Zulu language was not fully adequate to its wants. Accordingly, in May 1849, a Committee of three was appointed to consult, in respect to it, with other Societies in this colony, and report to the Mission such suggestions and alterations as might seem to them important.

In September the Committee reported and recommended, among other things, four new characters or signs. The report was adopted, and the Committee were instructed to procure the proposed new characters.

About this time, however, or a little after, several articles appeared in different places and periodicals, going to shew a close relation between many of the languages of Southern Africa. And it also soon appeared that several of the Missionary Societies in different parts of Africa, in reducing cognate dialects to writing, were introducing new and peculiar characters or symbols for the representation of certain sounds, which had no existence in languages already known and written; and that some others, who had as yet made no such change by the introduction of new characters, were feeling the necessity for something of the kind. Among the Societies which have already made use of several new characters in writing some of the African tongues may be named the Norwegian at Natal, the English Church Missionary Society among the Sooahelee, or Sowauli, on the east coast, and the American Board's Society at the Gaboon River on the west coast. And in a recently published Kafir grammar by the Wesleyans in Kafirland, it is said that certain "combinations—*tsh*, *hl*, *kl*, and *dhl*—would have been better represented by simple characters." "A separate character, also, either for the guttural sounds, or the foreign sound of *r* would certainly be an improvement, and, to the natives especially, a matter of convenience."

In view of some of these facts, the subject of a general uniformity in orthography was discussed at a meeting of the American Mission at Natal in December 1849, and a Committee appointed to prepare and issue a Circular Address to the friends of Missions and of learning in Africa, as above stated.

Not long after the issue of the Circular (March 1850) a little tract of half-a-dozen pages, prepared by Henry Venn, Church Missionary House (England), October 1848, and containing "Rules for reducing unwritten languages to alphabetical writing in Roman characters," was named, and afterwards forwarded to some of our members by the kindness of the Rev. J. J. Freeman, Corresponding Secretary of the London Missionary Society. Rules so carefully prepared and highly sanctioned as these seem to have been cannot fail to interest and aid all who may have to reduce unwritten languages to order, or be called to furnish a suitable alphabet

for them. As all who might like to see the tract may not have access to it, we will give a synopsis of it in this place. The first paragraph treats of the "want of a standard system of orthography." The second states that several Societies, whose Missionaries are engaged in vernacular translations of African languages, have proposed a common system for all works printed under their sanction, adding, in the next place, that the system coincides mainly with those which have been adopted by translators of African languages, and that it has not been attempted to form a perfect phonetic system. Then follow rules for the vowels *a*, *e*, *i*, *o*, and *u*, which are to be sounded as in Italian, as heard in the English words, *bath*, *bat*; *prey*, *bet*; *ravine*, *bit*; *home*, *boat*; *boot*, *full*: besides these, there are three intermediate simple sounds, which in some African languages require distinct letters, and which may be represented by *a*; an obscure sound between *a* and *u*, as heard in English *but*, *sun*; *e*, a sound between the sounds of *bat* and *bait*, well known in German as the sound of the letter *ä*; and *o*, a sound between *a* and *o*, as heard in English *law*, *water*, *not*. The sixth paragraph gives the order of these vowels according to their formation, thus, *i*, *e*, *e*, *a*, *a*, *o*, *o*, *u*.

The substance of the next three paragraphs is, that the same sign represents slight modifications of each sound, and must be subject to slight variations from accent and connection; that where the vowel-sounds are indistinct, the true sound may be learned from etymology, accent, or analogy.

Remarks upon the diphthongs occupy the four following sections, the substance of which is, that diphthongal-sounds are formed by the combination of the foregoing vowel-sounds, that the sound of English *i*, as in *ride*, *mile*, should be represented by *ai*, and the sound of the English *ow* in *how*, by *au*; and that when two vowels standing together are to be sounded distinctly and separately, the usual mark of diæresis should be employed, as in *ai̇*, *au̇*.

The next two sections suggest the importance of expressing slighter modification of vowel-sounds by diacritic marks or accent in vocabularies, but not in books for general reading. In respect to consonants, it says—paragraphs sixteen and seven-

teen, "give the usual sounds to *b, d, f, h, k, l, m, n, p, r, t, v, w, y*; let *g* be always hard, as in "gate;" *j* always soft, as *g* in "gentle, join;" *s* always as in "house;" *z* always as in "amaze;" and *h* always have its distinct sound, as in "hothouse, grasshopper." The usual sounds of *c, q, and x*, may be represented by *k, kw, and ks*.

If it be found necessary to provide for the sounds *ch, sh, th*, in which *h* has not its distinct sound, for the first sound, *c* may be used, as it has been rejected from the alphabet in its usual sound; for *sh* write *ʃ*; for *th* as in "thin," write *t̃*; and for *th* as in "thine," write *ʒ*.

In the eighteenth and nineteenth, which are the last paragraphs, it is said, that "It is advisable for the present to represent *compound consonantal sounds* by a combination of consonants, rather than by any diacritical marks, or by new letters.

"The nasal sound of *n* may be expressed by *ng*. A sound very common in many languages is represented by *gb, kp, &c.*

"Such combinations appear clumsy, but we are not yet sufficiently acquainted with the varieties of African sounds, or with the construction of African words, to warrant the adoption of new letters into the alphabet."

The retention of these and other inconvenient combinations will not stand in the way of the future adoption of any improved system of orthography.

From what has now been said and copied, we are prepared to state what we have also learned by experience, that *the work of giving African languages a suitable orthography is attended with no little difficulty*. The Missionary learned to read and write his own language by taking thousands of lessons in spelling, or by giving years of toil to the study of a dictionary. Perhaps he became acquainted with all the accidental, artificial, and incongruous combinations of characters in the words of his mother tongue without receiving a single lesson on orthography as a science, or giving the subject a single thought. He learned to spell as his fathers spelled, always assured that that was right. Having "finished his studies," he enters the Missionary field.

The people for whom he and his fellows have to labour

have neither books or characters for writing them. He puts himself to learning the language of an unlettered nation, and finds that he must catch and symbolize the hurried, indistinct, and, to him, strange sounds of a barbarous tongue. Without either time or means for devising a philosophical system of orthography, his most natural course is, to attempt to write the new language in the strangely redundant and capricious orthography of his own tongue, making such prior changes and subsequent improvements as his judgment and experience suggest.

Hence it cannot be thought strange that nearly or quite every Mission, especially those of different nations, should have a system of its own, and in several respects differing from all the others, with which neither itself nor any other Society or Mission is fully satisfied. These are some of the difficulties which arise from a defect in the Missionary's early education, and the absence of an acknowledged and complete standard, and the means of forming one when he first enters a Missionary field among an unlettered people.

But among some of the African languages, particularly the Zulu and its cognate dialects, there are peculiar difficulties in the way of devising or reconstructing a suitable orthography: they contain several sounds, especially clicks and gutturals, which are not found elsewhere. The inflections of the language are also, in many respects, different from those of other languages. By what characters shall these clicks, gutturals, and other peculiar sounds, be represented? What is the proper law for the union and division of words? How shall we write proper names which receive their inflections and increments in the incipient instead of the terminations?

How shall proper names be transferred from other languages into the Zulu? what changes may be properly made in them to accommodate their form or sound to the genius of the Zulu? These and other questions have long exercised the judgment and taste of translators and book-makers in African tongues, and have had a great diversity of answers given them in both theory and practice.

Another fact which may be stated in this connection is, that *the systems of orthography which have been adopted are*

regarded as improvable. That they should be so regarded might be at once inferred from the manner in which they were necessarily formed.

Nor are the imperfections of the first systems any ground of reproach to those who devised and adopted them. No one questions that they did well—the best that their circumstances allowed.

That these systems may be improved is a sentiment advanced in the Tract from which we have already copied so largely. The author of it, in proposing some general “rules,” says, “it has not been attempted to form a perfect phonetic system, but one which practical experience suggests as the most expedient under all the circumstances of the case.”

And again, in his closing paragraph, he says, “Such combinations appear clumsy, but we are not yet sufficiently acquainted with the varieties of African sounds to warrant the adoption of new letters. But the retention of these and other inconvenient combinations will not stand in the way of the future adoption of any improved system of orthography.”

And again, the several almost contemporaneous efforts and proposals in different quarters of Africa and elsewhere, to improve the present orthographical systems, or to devise or reconstruct one general and more perfect system, is a striking proof that there is room for improvement, and that the time has come for an earnest and united attempt to make it. Not long after the American Zulu Mission resolved to introduce several new characters into the orthography of the Zulu language, as above stated, we received a copy of the Gospel of Luke, translated into the Sooahelee language, or rather the Kinika, by the Rev. Dr. Krapf, which language is evidently a cognate of the Zulu family; and in the orthography of the book we observe the use of several new characters, or old characters so far modified by diacritical marks as to make it proper to ascribe to them new powers, and use them for the representation of new and peculiar sounds.

About the same time, or a little before, the Rev. Mr. Schreuder, of the Norwegian Missionary Society, prepared an elementary book in the Zulu, in which he has introduced three new characters to represent clicks, and some six or

eight old characters are so modified as to have new powers or values ascribed to them, and be equivalent to new letters.

The remarks upon this subject in a Kafir grammar recently published in Kafirland have been already noticed. And while we are writing we receive information that the Mission of the American Board at the Gaboon River, on the west coast, have introduced four new characters in the orthography of the language of the people among whom they are labouring. More might be added upon the point before us ; but enough has been said to shew that the present systems of African orthography are regarded as capable of being improved, and, moreover, that important attempts to this end are already under way.

Enough has also been said to suggest, if not to shew, that in devising or reconstructing an orthographical system we are very liable to err, and to make the system defective, redundant, or capricious, by employing too few or too many characters, or by assigning several different values to the same character, or by representing the same value by several different characters.

The recent tendency to introduce new characters would seem to indicate that there has been an error, though doubtless upon the safer side, in at first attempting to write with an insufficient or an inappropriate number of signs.

It is unquestionably true that new symbols should be introduced with great caution ; and when the work of improving, or of innovating, as sometimes it might better be called, has been once begun, there is danger, in this as in other cases, that it may be carried too far. The remarks of Mr. Pickering, in his " Essay on Orthography," are as true of African as they were of Indian languages, that, " as in the use of our own language it is much easier for every tasteless writer to invent new words according to his own caprice, in order to serve his immediate purposes, than patiently and carefully to select from our present abundant stock those appropriate terms which have the sanction of the best usage ; so, in constructing an alphabet for the Indian (or African) languages, it will be found a much shorter method to devise new and grotesque characters, than to apply with skill and discrimina-

tion those letters which are already in use either in our own or the kindred alphabets."

But while we admit this, we must also hold that every fundamental sound in a language should have its own appropriate representative.

On this side of the question, also, it has been well said, that "as it is impossible to overrate the importance of a truly philosophical system of orthography, one that shall faithfully represent every sound in the tongues to which it is applied; so almost no inducement should be sufficiently strong to tempt those who aim at such a phonetic alphabet to mar its beauty and perfection by appropriating signs already in use, even in a modified form, to designate new sounds, or by retaining old characters in combinations inconsistent with the great principle on which the alphabet is founded."

A complete orthographical system must be neither defective nor redundant. It should be absolutely invariable in its application, and so comprehensive and flexible in its plan, as to furnish a suitable representative for every sound in the language for which it is used. While we would be slow to multiply new symbols, especially such as have not been used in some manner, either in our own or other alphabets, we would by no means leave a single fundamental sound without its own specific and appropriate sign.

It is an expensive economy that would give two values to the same sign to avoid the multiplication of signs. If the laudable desire for an alphabet of few letters leads us to refuse a distinctive symbol to every generic sound, we shall complicate instead of simplifying the system, retard instead of aiding the progress of the learner, and perplex the reader and writer, instead of assisting him.

Let each character have one, and invariably the same value; and if a new sound is presented, for the certain and accurate representation of which the scheme of characters has made no provision, let another character be added to the scheme. But let not an old character be forced to suit a new station, a place for which it was never intended, and never fitted. Let not the uniformity and integrity of the whole system be impaired by once admitting the possibility of altering or

deviating from the symbolical signification once assigned to each character in the scheme.

In other words, our system of orthography should give a true exposition of the sound of words, and of all the sounds; and every single uncompoundd fundamental sound, which cannot be easily and accurately represented by a combination of letters, should have a single simple character of its own. No sound should ever be expressed by more than one (either simple or compound) character, and no character should ever be made or allowed to express more than one sound. So much we regard as both practicable and indispensable. And if, in addition to this, we could have all sounds within a certain degree of likeness represented by characters within a certain degree of likeness, and all sounds beyond a certain degree of likeness represented by different and distinct characters, and that uniformly, our alphabetical system would be full and perfect.

But it is not so much our purpose now to discuss, either in general the theory of a perfect alphabet, or in particular the danger, the difficulty, or the necessity of introducing new letters into the alphabets of African languages, as it is to call attention to the fact, that a beginning to introduce such letters into the said alphabets has already been made, and hence to shew that it is now too late to prevent such measures, even if we would. It seems, therefore, to be our wisest course to strive to give the measure a proper direction, and, if possible, to keep it within such limits as all can approve and observe, by stating our several wants, and expressing our opinions as Societies or individuals, and referring the whole subject to a general Committee, in whose knowledge, judgment, and taste, we have the fullest confidence.

For if every man, however poorly qualified, shall think himself adequate to the task of inventing new characters, or of introducing other important changes into the African systems of orthography; or if every Society shall give itself to such invention and changes, without consulting with others, or referring the matter to a general Committee; we shall soon see a much greater instead of a less diversity in the modes of writing African languages—shall meet with more of Babel in

their orthography—than was ever found in the tongues themselves.

But we shall be recommended to *systems and rules already proposed*, and urged to adopt and abide by them. It will be said, there is Pickering's excellent system of orthography; why do you not make that your standard, and secure uniformity by a general compliance with its principles and adoption of its alphabet?

To this it may be replied, first, that the American Mission at Natal has made his system the basis of their orthography, and are satisfied with it so far as it goes, or is applicable to our circumstances, especially that part of it which relates to the vowels. But we think something better may be devised in regard to consonants.

His system, as will appear hereafter, does not meet our wants. And the same is true of the "Rules" of which we have already given a synopsis. Neither of those systems were prepared with a reference to a large class of African languages, and have made no provision for them. The sequel will shew, that for several fundamental sounds in the Zulu and its cognates, and in several other difficult but important points, in respect to which there is a diversity of opinion and practice among Missionaries in Southern Africa, neither Pickering's Essay, nor the "Rules," nor any other system with which we are acquainted, has made any alphabetical provision, or propounded any general principles for correct and uniform guidance. Some of these sounds are the clicks and guttural, and some of the other difficult points are such as have been alluded to as growing out of the radical difference between the Zulu, or rather the whole class of Chuana tongues, and any other known language.

Neither of these systems profess to be either fitted for universal application, or even the best that could be devised for the particular languages for which they were prepared.

Mr. Pickering's system had its origin in his feeling the need of a uniform orthographical system, more particularly of the North-American Indian languages, and for philological rather than educational purposes; and without particularly studying the condition, or consulting the convenience of the

unlettered savage of any nation, much less of all the uncivilized world, he resolved to do the best he could with the materials which he had at hand, and set himself resolutely and praiseworthy to the task of reconstructing a system which should comprehend particularly all the sounds of the Indian languages of North America, and be at the same time not only practicable and intelligible to the skilful and learned of all nations, but also as flexible and comprehensible as it could be without the introduction of symbols not already in use.

And none will deny that he attained his object, and did a great work for science and humanity. The "Rules" also profess to be but a temporary and imperfect arrangement, until a better "acquaintance with the varieties of African sounds, and the construction of African words, shall warrant the adoption of new letters into the alphabet." Indeed, these "Rules" look directly for something better when they close by saying, "the retention of these clumsy and inconvenient combinations will not stand in the way of the future adoption of any improved system of orthography."

This brings us to consider more fully the propriety of introducing new characters into the African alphabet. And we may say more distinctly now, what the tenor of our remarks already indicate, that we are of opinion that several new characters are needed.

To a correct and full expression of all the sounds in the Zulu dialects a few such characters are indispensable; and it will be remembered here that the Mission once decided to obtain some. And the fact already noticed, that new characters have been introduced by other Societies, is a plain declaration that they also deemed the measure expedient.

The "Rules," moreover, recommend the same course when they speak of using *s* for *sh*, *t* for *th*, &c.; for these radical modifications of an old character, so as to make it stand for a distinct fundamental sound, do in reality make of it a new character. The sounds for which the American Mission at Natal resolved to procure new characters had been represented (imperfectly) by *hl* hard, *hl* soft, *ty* and *j*, most of which are the same as those of which the Wesleyan Kafir

Grammar soon after remarked (though without any knowledge of our opinion and action), that they "would have been better represented by simple characters." They are also included among the number for which Mr. Schreuder invented new characters in the alphabet of his recent elementary Zulu book.

To what extent modifications or variations of fundamental sounds should be indicated, and what is the best manner of doing it, are points which we may leave, in a great measure, to the decision of others. In respect to the vowel-sounds, we have as yet marked only the five fundamental, *a, e, i, o, u*, without attempting in any way to indicate any of the intermediate sounds, or any of the modifications usually called long, short, or full, stopped, &c., nor have we as yet suffered any very serious inconvenience from such neglect; though, in remodelling our system, we think it important to have provision made for making these modifications in our dictionaries and elsewhere, if we choose.

There are also slight modifications of some of the consonantal sounds, and especially of clicks, which we have attempted to indicate by an additional consonant, as by *n, g, ng*, &c., before certain other letters, which modifications we think might be better indicated, in some cases at least, by diacritic or other marks attached to the letter symbolizing the principal sound. But this part of the subject will be more particularly discussed in another place, in which connection we may notice such modifications as we would have signified after the manner here referred to.

That unseemly, or even erroneous compounds are used for simple sounds in the orthography of the English and other languages, long since reduced to writing, whose orthography has been so much a matter of chance in its origin and progress of development, and for so long a time stereotyped with all its anomalies, defects, and redundancies, seems not a sufficient reason for introducing and perpetuating the same in the orthography of languages newly reduced to order and writing, especially if the orthography of the new language must of necessity differ in some respects from that of any old system, which may be borrowed and made a basis.

If the new language contains fundamental sounds which do not exist in the old, from whence we borrow our orthography, and the Zulu and its cognates do contain such sounds, then we must use either new characters, or old characters in a new sense, to represent them; and in either case we alter the system to suit our purpose, which alterations are often as great as are required in the substitution of simple for compound characters.

The use of neat and significant simple characters, instead of inappropriate, clumsy, if not really ambiguous compounds, is attended with a great practical advantage. It makes the labour of teaching and learning to read more simple and easy, and consequently saves the time and strength of the teacher and pupil, and secures to the people a better education. For it must be remembered that the symbols used in compound characters are, to some extent at least, generally turned out of their proper place, their primary value is changed, an interpretation is put upon them in their combined state, somewhat different from what they have when used separately and alone. But the simple-minded native, unaccustomed to the more refined intellectual operations, is not prepared for such an analysis or synthesis of sounds and letters as would enable him to gather the value of such compounds from any knowledge which he might have of their component parts.

He must learn the character by rote as a compound, or rather as a simple, and yet without knowing that it is a compound used for a simple, or that the parts are not to have the same full independent values in these as in other cases. Hence the symbols become ambiguous, having in some cases a truly modified, if not really a twofold value, and that without any sign of the modification, and all while we profess to give each character one and only one uniform sound. Such ambiguities, unsteadiness, and inconsistency in orthography are serious hindrances to learning to read among any people; but especially so to those whose dark and undisciplined minds are yet to receive almost the first ray of light, and the first iota of discipline.

Many examples in illustration of these remarks might be given from our books and our experience in teaching, but it

is unnecessary. The uncouth and ambiguous combinations, and other absurdities which have found a place in the orthography of the English and some other languages, and the great evils which result from them, may be tolerated, perhaps, for years to come, but for reasons which can never be urged for our introducing and perpetuating them in the languages of Africa. These evils, and the complaints which are made with increasing earnestness against them, and the great labour and difficulty of getting rid of them, should afford us a sufficient warning never to incur the same, or give our sanction to them in devising an orthographical system for an unwritten language.

With these remarks upon the past and present state of South-African orthography, and upon the necessity for a general attempt to improve it, we proceed to the more particular subject of Phonology.

In considering THE PHONOLOGY of the Zulu language and its cognates, we will first give the alphabets which have been used by our Society and by other Societies in this field, and then endeavour to present a full scheme and representation or description of all the sounds of the language, and name such as we think might be well symbolized by new or modified characters.

The orthography of the Zulu language, so far as respects the characters heretofore used by our Mission, has been briefly noticed in the Journal of the American Oriental Society, Vol. I. No. 4, in the account there given of the Zulu language. It is as follows:—"The Zulu alphabet, according to the notation of the American Missionaries, contains the same letters as the English, but many of the letters are called by different names, and represent different sounds. The vowels have each one uniform sound, as follows:—

A has the sound of broad *a* in "father," or "car";

E has the sound of long *a* in "fate," or *ey* in "prey";

I has the sound of *ee* in "meet," or of the French *i* in "pique";

O has the sound of *o* in "note, toll";

U has the sound of *oo* in "boot, pool."

"The *g* is always hard. The *r* denotes a deep guttural aspirate, similar to the Hebrew ר (Hheth).

“The other consonants have nearly or quite their usual sounds in English. The Zulu, like the Kafir, has three clicks, represented in our books by the letters *c*, *q*, and *x*, the last being precisely the click made in the side of the mouth by which a man urges forward his horse.”

The same volume contains similar remarks upon the same subject, in the article on “The Zulu and other Dialects.”

The alphabet employed by the Norwegian Society is as follows:—First, *a, b, d, e, f, g, h, i, k, l, m, n, o, p, s, t, u, w, z*, all of which have respectively the same value as they have in our alphabet of the Zulu. In addition to these, their alphabet contains the following letters:—*j* Eng. *y*; * ■ = *dhj*, Eng. *j*; ■ = *k*, or aspirated, or Greek χ (chi); ■ ; ■ = *dhl*, lateral softly aspirated *l*; ■ = *thl* strongly aspirated *l*; *r* = *rh* guttural; ■ guttural aspirated *s*, harder and stronger than ordinary *s*; ■ = Eng. *v*; ■ dental click, our *c*; ■ lateral click, our ■ ; and ■ , gutturo-palatal click, our *q*. (“Grammatik for Zulu-Sproget forfattet, af H. P. S. Schreuder, Missionary in South Africa.” Christiana, 1850.)

The Berlin Missionary Society in this colony use the same characters as the American Missionary Society. Their combinations of consonants, and of consonants and clicks, and their method of dividing and connecting words, differ in some respects from ours.

The best published account and specimen of their orthography may be found in the Rev. C. W. Possett’s “Zulu Companion,” Pietermaritzburg, 1850.

PHONOLOGY OF THE ZULU LANGUAGE.

1. *Vowels or Vocalic Sounds.*

The vowel-sounds of the Zulu language may be divided into three classes, *long*, *short*, and *obscure* or *medial*. The difference between the long and short vowels lies not so much in the quality of the sound, for in both cases it is radically the same, as in the strength or weakness, which also corresponds to the length or shortness as to time with which they are enunciated. In other words, the terms *long* and *short*, as

* The blank spaces indicate the clicks, for which we have no types in England. R. C., *Hon. Sec.*

applied to vowels in Zulu, refer to or depend upon accent, in that degree of loudness and distinctness of tone which is consequent upon strength of muscular action, rather than that difference in quality or marked variety of sound which depends upon the length of the vocal cavity, or the tube which confines the vibrations, and upon the modification of which (tube) depend the tones of the voice, and the generic character of the vowel-sounds. Such is, at least, the general character of the difference between the long and short Zulu vowels, and it holds emphatically in respect to the two vowels *a* and *o*. Hence the difference between *a* long and *a* short in Zulu is the difference between these two letters, or rather the sounds, as heard in English, in the one case in *father*, where it is long, and in the other case in *genera*, *dogma*, where it is short. Thus, in *udade*, "sister," *a* is long in *umfula*, "river;" it is short. The difference between *o* long and *o* short is as the difference between *a* long and *a* short; but there is wanting a good word in English by which to represent the short *o*.

The long *o* in Zulu is the sound of *o* in English *bone*, *note*; the short *o* is of a weaker and quicker enunciation, but of nearly the same quality, slightly inclining to the sound of *o* in *none*, or that of short *u*. It is between that of *o* in *hole*, *bone*, and of *o* in *none*, *done*. Thus, in *ukubona*, "to see," and *inkosi*, "chief," *o* is long, but in *into*, "thing," and *ubuso*, "face," it is short.

The short *e* and *i*, however, do not seem to hold to the generic characters or respective qualities of the long vowels so tenaciously as the short *a* holds to the generic quality of the long *a* and short *o* to long *o*. The difference between long *e* and short *e*, and between long *i* and short *i*, is chiefly, however, that of accent, as in the case of *a* and *o*, though there seems also to be a slight difference in that quality of the sound, which depends upon the lengthening of the vocal tube. Thus, *e* long is sounded as *ey* in *they*, *prey*, *obey*, Zulu *wena*, "thou"; *e* short as *e* in *then*, *bed*, Zulu *kuhle*, "nice," *itye*, "stone." *I* long is sounded as *i* in *ravine*, Zulu *mina*, "I," *tina* "we;" *I* short as *i* in "pit," Zulu *ubani*, "who." As another illustration of this letter, and also of the general principle or difference between the long and short Zulu vowels, take the

word "seeing." In this word the *ee* are sounded as *i* long in Zulu, while the *i* in *seeing* is sounded as *i* short in Zulu; and the two sounds, that of *ee* and of *i* in "seeing," are respectively that of *i* and of *i* in *emini* "midday," and in *ababili* "two persons," the penultimate *i* being long=*ee*, and the final *i* being short=*i* in the word "seeing." This general difference in the length of vowels in Zulu may be further illustrated by taking certain English words, and observing the difference in the force and length of certain vowels according as they do or do not receive the accent; e.g. the sound of *a* in "man" and in "woman," "Japan and Japanese," "Asia and Asiatic," and the sound of *e* in "Egypt and Egyptian."

As a general rule, sufficiently correct for all practical purposes, we may say that the vowels of the *accented* syllables are *long*, while those of the *unaccented* are short. But the long vowels are not all of the same uniform length; neither are the short vowels all of the same uniform shortness. Between the ordinarily long and short, or rather between those of the medium length and those of the medium shortness, there is another grade, a vowel-sound of intermediate length, which is found for the most part under the secondary accent of long words, as the long vowels are formed under the primary accent, as in the word *ukutuhula* "to pour out," where the primary accent falls, as usual, on the penult, while the secondary accent falls on the initial of the word. Hence the *u* after *k* and *t* is short, the *u* in the penult is long, and the initial *u* is longer than that after *k* and *t*, but shorter than that after *l* in the penult, or is of intermediate length. And then, again, the difference in length between the long and short is scarcely greater than that between the short and shortest, or greater than that also between the long and longest. Thus, in the word *wokulondoloz*a, "for preserving," we have the vocal *o* four times: in the penult it is long; in the first syllable, *wo*, it is intermediate; in the syllable *lo*, before *nd*, it is short, but not so short as in the syllable *ndo*, which is pronounced more lightly than any of the rest. This word has three accents—the primary on the penult, the secondary on *wo*, and the tertiary on *lo*, before *nd*.

Again, take the words *itole*, "calf," and *umqoto*, "an up-

right man," and we have an instance of *o* long in the penult of the first, *itole*, and of *o* somewhat longer than usual in the penult of the second, *umqoto*. Hence in these two words, *wokulondoloza* and *umqoto*, we have the following series of the vocal *o*, viz. shorter, short, intermediate, long, and longer. So, also, we have the same series of the vocal *u*. In the word *usungulu*, "needle," it occurs four times, being long in the penult, short in the syllable *su*, shorter in the final syllable, and between long and short in the first syllable. It is long also in *susa*, "remove," but longer in *bula*, "mention." Hence in the words *usungulu* and *bula* we have the same five varieties of length in the vowel *u*, as we had in the vowel *o*. And the same might be shewn of the other vowels. But these minor differences need not be marked.

As, in naming the colours of the rainbow, we do not pretend to specify all the minute varieties and gradations of shade, but deem it sufficient to select and designate the principal; so, in the series of vocalic and consonantal sounds, we must content ourselves with denoting those which are generic and fundamental, and leave the less important subordinate shades to arrange themselves under their respective principals. The long and short vowels, as such, have not as yet been marked in our orthography of the Zulu; though it may be important to have this done in vocabularies, and perhaps some other books. But as to how these differences should be designated, whether by figures or some kind of diacritic mark above or below either the long or short vowel characters, we are not so well prepared to speak as those to whom we refer the subject, or those more conversant than we are with the different methods in use, and with their respective advantages and disadvantages, and with the facility of obtaining the different kinds of type which might be required.

Any system of notation which is simple, sufficient in good taste, and on which all are agreed, will satisfy us.

The obscure vowel-sounds are found chiefly at the end of words, where they are often passed over so slightly as to become almost, and in some cases quite, imperceptible in ordinary speech. In such cases the true vowel-sound is generally ascertained only by a particular effort, or by taking the word in combination or inflection where the sound is

brought out more fully, or known by analogy. Examples of this class are found in the final vowels of such words as *ubumhlope*, "whiteness"; *isiribe* "a noose"; *umgani*, "friend"; *Udingani*, "a proper name of a person"; *inkosi* "chief"; *ihashi*, "a horse"; *indao*, "place"; *icino* "extremity"; *irubo*, "song"; *inceku*, "servant"; &c.; and hence these words are often written—*isiribi*, *ihashe*, *indau* or *indawo*, *inceko*, &c.

Some of these differences may be dialectic or tribal, and hence real, though the vowel is perhaps equally obscure in each case.

But if we inflect the word and put the nouns in the locative case, the formation of which follows certain fixed laws,—as that nouns in *e* final make the locative in *eni*; those in *i* final, in *ini*; those in *o* final, in *weni*; and those in *u* final, in *wini*,—the accent is carried forward and made to fall on what was obscure in the simple form of the word, which change of accent generally determines at once what is the true sound, and what letter should be employed to represent it.

But the obscure intermediate vowel-sounds are not found exclusively at the end of words: they occur occasionally elsewhere.

An obscure sound, intermediate between *e* and *i*, is sometimes heard, as in *pumisa* or *pumesa*, "put out"; and a sound intermediate between *e* and *u*, as in the same word *pumisa* or *pemisa*; and also between *i* and *u*, as in the same word again, thus, *pimisa* or *pumisa*; between *o* and *u*, as in *Umhlote* or *Umhluti* (name of a river), *Utogela* or *Utugela* (name of a river), *umunumuzana* or *umunumuzana* "a man of wealth and influence."

The vowels *u* and *i* are sometimes used somewhat furtively, or as a kind of sheva, sometimes appearing, and sometimes not, and sometimes having a kind of suppressed utterance, as *umusa* or *umsa*, "mercy"; *ukukazimla* or *ukukazimula*, "to glisten"; *ubumnyama* or *ubuminyama*, "darkness"; *inkabi* or *inikabi*, "an ox."

There is also, in Zulu, a slightly modified sound of the vowel *e*, the same as the German *ü*, a sound between that of *a* in "bat" and *ai* in "bait"; thus, *hambela*, "walk about, or for," from *hamba*, "walk," and so generally in what is called the relative or objective, or *el* form of the verb.

It is not, however, thought advisable to introduce new characters, or the use of diacritic or other marks, to represent these sounds, as some of them vary but slightly from their cognate or leading sounds, some may be the result of a careless pronunciation, some of them may be dialectical differences; and those which are really intermediate between two different vowels may doubtless be gathered under one or the other fundamental and distinct vocal cognates without inconvenience, or violence to the language. If, then, we pass over these obscure vowel-sounds, and also the nicer varieties or shades, above referred to, and represent the long or independent vocal sounds, as heretofore, by the simple letters *a, e, i, o, u*, and indicate the shortness or dependence of the sounds, as is sometimes done, by a circumflex over the letters, we have the following

List of Vowel Characters,

with their corresponding values assigned:—

Long.		Eng.	Zulu.	Short.		Eng.	Zulu.
<i>a</i>	as	in "father,"	<i>umame</i>	<i>ă</i>	as	in "dogma,"	<i>umsa.</i>
<i>e</i>	..	.. "prey,"	<i>wena.</i>	<i>ĕ</i>	..	.. "let,"	<i>itye.</i>
<i>i</i>	..	.. "ravine,"	<i>mina.</i>	<i>ĭ</i>	..	.. "pit,"	<i>ububi.</i>
<i>o</i>	..	.. "bone,"	<i>uboya.</i>	<i>ô</i>	..	.. "none,"	<i>uyihlo.</i>
<i>u</i>	..	.. "cool,"	<i>ingubo.</i>	<i>û</i>	..	.. "full,"	<i>insimu.</i>

2. Diphthongs.

In writing the Zulu language no use has been made of improper diphthongs or digraphs. Each vowel has, in all cases, its own sound, though the sound is not always so open and full in the diphthong as in other situations.

All writers, however, on the Zulu language, and also in it, are not agreed on this subject.

Some say, that in a few cases two vowels combine for the formation of one sound, as in *hai* "no," *Uncapai*, a proper name; others, that there are in Zulu no diphthongs, but that whenever two vowels meet, the separate power of each is distinctly marked and preserved in pronunciation. But the truth seems to lie somewhat between these two classes,

though there are also tribal or national differences on this point.

Again, the same writer or translator has not been always uniform in the application of his principles, so as to write all words (all vowels having the same or similar relation to each other) by the same rule. Hence among the different writers we have *a i k o* *ayiko*, or *a yi ko*, "it is not"; *a u ko*, *a wu ko*, or *awuko*, "it is not"; *hlaula* or *hlawula*, "pay penalty"; *au* or *awu*, "O"! *indao* or *indawo*, "place"; *unyao* or *unyawo*, "foot." But a close observation of the manner in which the natives pronounce these and similar words and syllables, at least in this region, and as seems to us, as well as the greater simplicity of writing, and the surest way of securing uniformity, warrant and recommend that we make no use of digraphs; that such a mode of writing the diphthongs be practised as will allow the vowels to retain their own sounds, so that their generic quality be not wrested in the blending to which they may be subject; that we give each vowel a separate pronunciation in all cases, allowing it, however, to be more close in diphthongs (especially in the diphthongs *ai* and *au*) than elsewhere; and that we incline rather to a light, neat, and flexible, than to a loose, cumbersome, and drawling orthography, and take care not to insert a consonant between two vowels, making *a yi ko* of *a i k o*, *a wu ko* of *a u ko*, and *indawo* of *indao*, &c., simply to aid in the spelling exercise of the pupil, or for any other purpose, where the best native pronunciation does not strictly require it.

If we adopt this course, we shall have the following Zulu diphthongs with their assigned values, viz.—

Ai, nearly the sound of *i* in "pine," or the sound of the interjection "ah" and the pronoun "ye" rapidly pronounced together, as in the Zulu words *ai*, "no," *hai*, "no," *ugwai*, "snuff."

Au, sounded as *ou* in "ounce," or *ow* in "now," as in the Zulu words *au*, "oh," *gaula*, "chop," *hlaula*, "pay a fine," *umrau*, "compassion."

Ao, in which the components retain their own respective values as before defined, as is the case, also, in the other diphthongs, as in the words *indao* and *usaoti*, "salt," as Zuluized from the English word *salt*.

Eu, in which the vowels retain their respective values, as in the words *imbeu*, "seed," *ukweula*, "to descend."

3. Consonants.

Before proceeding to speak of the individual consonantal sounds of the Zulu, it may be well to notice generally what will find an illustration as we proceed, in several instances, and what might be expected in an unwritten language, namely, that many of the sounds of this language, consonantal and others, are not so fixed—the lines of demarcation, especially between cognate consonants, as *b* and *p*, *g* and *k*, *v* and *f*, &c., are not so distinctly drawn and uniformly observed, as in languages long since reduced to writing. This evil, however, must and will be corrected as a knowledge of letters is extended among the people. The fluctuating pronunciation and intermediate shades of consonantal as well as of vocalic sounds must be arranged under their nearest and most appropriate principals. When, therefore, in the following remarks, the value of a given letter is stated, and it is added that this letter also represents a sound intermediate between that and another, or that it should represent such a sound, it is not to be understood that such a letter has two values or one principal and one modified value, but that its value is fixed and uniform, and that slightly varying shades are arranged under it, and made, or designed to be made, to conform to it.

We will now attempt to give and describe the several consonantal sounds of the Zulu language, taking as our guide, and as the basis of our remarks, the letters (simple and compound) which have been used heretofore, and endeavouring to notice also, in their places, those sounds which as yet have had no suitable representative assigned to them.

B is sounded in Zulu as in English; as "but," "number"; *ubaba*, "my father"; *bona*, "see"; *yebo*, "yes": under it is ranked, also, a somewhat modified sound of this letter, nearly intermediate between the genuine *b* and *p*, as *koboza* or *kopoza*, "dig and plant again." This intermediate sound is heard, also, in other instances, in which it comes nearer to *p* than to *b*, and hence is reckoned under that letter, as in *gapula* or *gabula*, "break"; *popoza* or *boboza*, "weep."

D has a clear distinct sound, as in "death, did," *udade*, "sister"; *kodwa*, "but." It is also used to represent a sound nearly intermediate between *d* and *t*, as *Udambuza* or *Utambuza* a proper name; *ukudunduzela* or *ukutunduzela*, "to comfort." This is common.

F has generally a clear sharp sound, as in "fate, if"; *umfana*, "boy"; *funda*, "learn"; *isiko*, "disease."

There is also a sound intermediate between that of *f* and *v*, which is sometimes expressed by *f* and sometimes by *v*, as in *Uzafugana* or *Uzavugana*, a proper name; *ukuvuta* or *ukufuta*, "to blow, ignite, rail."

G is always hard, as in "go, game, log:" *igama*, "name," *geza*, "wash." It is often preceded by the ringing nasal sound of *n*, especially in the beginning of the particles and prepositions, as *ng* (a euphonic copulative particle like "is, are," in English); *nga*, "on account of," &c.; *ngi*, "I, me." The sound represented by this combination of consonants is a simple elementary one; therefore, in using these letters to express it, they (especially *n*) are turned aside from their proper office.

The sound is nearly the same as that of *ng* in "king, ringing, ending." There is also a sound intermediate between that of *g* and of *k*, which is, in some cases, expressed by one letter, and in others by the other; as in *Uzafugana* or *Uzafukana*, a proper name, (see *F*); *ukuganda* or *ukukanda*, "round"; *Utugela* or *Utukela*, name of a river, (see Vowels).

H is an aspirate, as in "hat, behave": *hamba*, "walk"; *haya*, "sing"; *ihashi*, "horse." The sound represented by *h*, as uttered by the natives in such words as *hamba*, *haya*, &c., comes nearer to a guttural than the English *h*. The Zulu *h* may be called a guttural aspirate, and be sounded with more force and depth than in such words as *hat*, *hand*, *home*. The most common use of this letter in Zulu orthography is in combination with *l*, making *hl*, where, in some cases, the *h* is scarcely aspirate, but helps to represent a sound which some have tried to represent by *dhl*; while in other cases the *hl* must be strongly aspirated to represent the sound which some have tried to indicate by *thl*.

The pure proper sound of *h* is not very common in Zulu.

J has, in Zulu, the same (*dzh*) sound as in the English

words "judge, jar": Zulu *jabula*, "rejoice"; *isiyingi*, "pudding." This sound, hardened, or uttered with a strong aspiration, comes near to a very common sound in Zulu, which has been represented sometimes by *ty* (see *ty*).

K.—The sound of this letter is the same in Zulu as in English, as in "keep, king": *kodwa*, "but"; *kambe*, "of course." As has been remarked, it is sometimes made to express a sound intermediate to that of *k* and *g* (see *g*). In words transferred from other languages it is used to represent the sound of *c* hard, as *ikam*, or *ikama*, or *ikom* "comb"; *ikamolò* "camel."

L, in Zulu, has the soft liquid sound of the same letter in English as in the words "love, lark": *londa*, "keep"; *bala*, "count." As has been already remarked, *l* has been often compounded with *h*, making *hl* sometimes representing the soft lateral dento-lingual sound of *dhl*, as in *ukuhla*, "to eat"; and sometimes representing the aspirate palato-lingual sound of *thl*, as in *hlala*, "sit," (see *h* and *hl*).

M has the same sound in Zulu as in English, as in "man, me": *musa*, "must not"; *mina*, "I, me"; *puma*, "come out." This letter is combined with many other consonants, as *mb*, *mf*, *mhl*, *mn*, *mnz*, &c. (see *Combinations of Consonants*).

N has two sounds, the one pure, simple, as in "no, name": *na*, "and, with"; *ni*, "ye"; *ukuneta*, "to be wet"; the other, the half-suppressed nasal compound, as in "bank, thing": *ngena*, "enter"; *nga*, "by, on account of"; *umnyaka*, "year": it also enters into combination with other consonants (see *Compounds of Consonants*).

P has generally, in Zulu, the clear sound of the same letter in English, as in "pin, past"; *pila*, "live"; *ukupa*, "to give." It is, however, used in some cases to represent a sound between the proper *p* and *b*, an indistinct intermediate sound like that of the same letter in "cupboard," as *Umpohlo* or *Umbohlo*, a proper name.

R.—The English sound of *r* is not found in the Zulu language, and it is with the greatest difficulty that the natives can be taught to utter it properly: they always incline to give the sound of *l* in place of *r* when required to utter the latter.

This letter has, however, been employed in Zulu orthography to represent generally several guttural sounds of

different degrees of depth and strength, from the guttural aspirate *h* to the peculiarly harsh, deep-toned guttural, unknown and unutterable to the European, as in *rola*, "lead," where the sound of *r* is but a little more aspirate and guttural than *h*; *rara*, "be voracious"; *raga*, "surround," where the guttural is much deeper and stronger (see *Gutturals* hereafter).

This letter has also been employed in another, professedly its English value, in words taken from other languages, particularly in the name of Christ (*Ukristu*). But the natives generally give this letter, in such words, the guttural sound which it is made to represent in their own language, or they change it to *l*, or they omit it entirely. This letter, therefore, has several values in Zulu, being made to represent at least two different gutturals, and the English sound of *r*—an evil, surely, which ought to be remedied in the new orthography. The true English sound of *r* is said to be very common in the Sichuana language, a cognate of the Zulu.

S.—The value of this letter varies from the soft flat sound approaching the *z*, in "as, nasal"; *ukusungeza*, *ukuzungeza*, "to go round"; to the sharp hissing English sound of it in "us, saint": *insika*, "post"; *inkosi*, "chief." The most common sound is the sharp hissing, the variations to the soft flat being rare, and often slight.

T is sounded as in "tide, net"; *tina*, "we, us"; *teta*, "reprove, judge"; *tula*, "be silent." There are intermediate sounds, as above remarked under *d*, between this and that letter, which are sometimes represented by *t* and sometimes by *d* (see *d*). *T* has also been compounded with *y*, making *ty*, to express a sound in some cases analogous to the English *ch* (*tch*), as in "church": *tyetya*, "hasten"; *ukutyo*, "to say"; (see *Ty*). *T* has also been employed in some cases before *s*, to represent the strong hissing sound of that letter, as in *nansi* or *nantsi*, "here it is"; *intsika*, "a post."

V is sounded as in "vine, cave": *vala*, "shut"; *ukova*, "banana." This letter is also used to represent a sound between that of *f* and *v*. (See *f*.)

W is always a consonant in Zulu, and has the English sound of that letter, as in "way, wise"; *wisa*, "cast down"; *wena*, "thou"; *ukuwela*, "to pass over."

Y is always a consonant in Zulu, and has the English value of that letter (in our system of orthography), as in "yes, you"; *yonke*, "all"; *yala*, "admonish." Y is also compounded with *t*, making *ty* (see *t* and *ty*).

Z is sounded as in "zeal, freeze"; *izwi*, "word"; *izinkomo*, "cattle."

4. Combinations of Consonants.

The present method of writing the Zulu language makes use of a large number of consonantal combinations. These may be divided into two classes—the combination of consonants with consonants, and the combination of consonants with clicks. The former, and their value, are chiefly as follows:—

Dw, as in "dwarf"; *indwangu*, "cloth"; *kodwa*, "but."

Ghl has been used sometimes to express a sound which is not found in English, and not easy to be described. It is sometimes represented by *hl*, and sometimes by *dhl*, as in *ukughlula*, or *ukuhlula*, or *ukudhlula*, "to surpass or pass by" (see *hl* flat or soft below.)

Gw, as in *ukugwinya*, "to swallow"; *isigwanxo*, "bar or bolt," like *gu* in "language, languor."

Hl, as in *ukuhla*, "to eat"; *amanhla*, "strength"; *hlala* "play"; *hlula*, or *ghlula*, "pass by"; which has no corresponding sound in the European tongues. The sound of *hl* in this case is similar to that of *hl* below, but is not so strong: the *l* is but slightly aspirated, and the aspiration in this case is more lateral. It has sometimes been not unskillfully represented by *dhl*, and may be called the flat dento-lingual *l* slightly aspirated.

Hl, as in *umhla*, "day"; *ukuhlupa*, "to afflict"; *hlala*, "sit"; *umhlaba*, "the world." This has no corresponding sound in the European tongues. It is the sound of *l* strongly aspirated, and sometimes represented by *thl*, occasionally by *khl*, or by *tl* and *sl*. It is similar to *hl* above; but here the aspiration is palatal, there it is lateral; here very strong, there very slight; here hard, there soft.

Hlw, as in *umhlwa*, "white apt"; *uhlwayi*, "shot"; *umhlwazi* (sort of snake). This is the sound of the first *hl* above, with the addition of *w=dhlw*.

Hlw (thlw), as in *ukuhlwanyela*, "to sow": the same as the sound of the second *hl* above, with *w* added.

Jw, as in *ijwabu*, "a strip"; *umjwacu*, "lean beast"; *jwayela*, "be accustomed."

Kl, much like *hl* hard, as in *ubuklapaklapa*, or *ubuhlapahlapa*, "prodigality"; *inklango*, or *inhlango*, "ree-bok."

Kw, as in *ukukwela*, "to mount"; *ukwanda*, "to increase"; the sound of *qu* in "quantity, queen."

Lw, as in *ukulwa*, "to fight"; *isilwane*, "a wild beast"; not found in English, but may be produced from "will want," "shall waive," &c., by prefixing the final *l* of "will" and "shall" to the following words—"want," and "waive," &c.

Mb, as in *ukumba*, "to dig"; *ukuhamba*, "to walk"; *isidumbi*, "a bean." It will be remembered that the Zulu makes, for the most part, open syllables, so that the proper division of these words is thus—*u-ku-mba*, *u-ku-ha-mba*, &c. This sound of *mb* occurs frequently, and consists of the half-suppressed sound of *m* before *b*, as may be seen in the English words "amber, perambulate," by separating the *m* from the foregoing, and prefixing it to the following syllable thus, *a-mber*, &c.

Mf, as in *umfumfu* "August (?)," *umumfama*, pl. *abamfama*, "friendless"; *ukumfonona*, "to perspire." This sound may be produced from such words as "brimful, lymphatic."

Mhl, as in *ubumhlope*, "whiteness": the sound of the second *hl* above, preceded by *m*.

Mk, as in *ukwamkela*, "to receive."

The Zulus often insert a furtive *u*, or *sheva*, after *m*, in such words, making *ukwamukela*. But this word thus written might be taken for the relative form of *ukwamuka*, (*ukwamukela*), which means, "to take away by force," while *ukwamkela* means "to receive."

Ml, as in *ukwamleka*, "to be habituated"; *ukuzamla*, "to gape"; *umpefumlo*, "soul"; not found in English, but may be produced from such words as "hamlet" by joining *m* with *l*.

Mn, as in *ubumnandi*, "sweetness"; which sound may be produced from such words as "hymned, hymnology," &c.

Mny, as in *ubumnyama*, the sound of *mn* above united with

that of *y*. Some regard it as proper to insert a *sheva* or furtive *i* in this word, making *ubuminyama*, "darkness"; but the sound of *i* is seldom if ever heard in the native pronunciation.

Mp, as in *inswempe*, "a quail"; *insumpa*, "a wart"; sounded as *mp*, in "lamp, hemp."

Ms, as in *gomso*, which may take the furtive *u*, and become *gomuso*.

Msh, as in *ukukumsha*, or *ukukumtya*, "to interpret": this is the sound of *sh* or *ty* preceded by that of *m* (see *sh* and *ty*).

Mt, as in *ubumtote*, "sweetness"; sounded as *mt* in "tempt, empty," where *p* is silent.

Mv, as in *inhlamvu*, "fruit"; *emva*, "after"; a sound not found in English, but made without difficulty: sometimes *u* is inserted, making *emuva*, &c.

Nd, as in *ukutanda*, "to love"; *ukupenduka*, "to turn, repent"; *Umsindisi*, "Saviour"; sounded as in "hand, brand."

Ndw, as in *undwendwe*, "a row, ridge"; not found in English, but composed of *nd* above and *w*.

Ng, as in *isango*, "gate"; *ngena*, "enter"; *umsengi*, (kind of tree); sounded as *ng* in "sing, reading" (see *g*).

Ngw, as in *igwangwa*, "unripe fruit"; *sengwa*, "be milked"; sounded as *ngu* in "language, languor."

Nhl, as in *amanhla*, "strength"; sounded as the first *hl* above with nasal *n* prefixed = *ndhl*.

Nhl (*nthl*), as in *inhle*, "it is nice"; *amanhlambe*, "waves": sounded as the second *hl* above with nasal *n* prefixed.

Nj, as in *njalo*, "thus": *njani*, "how"; like *nj* in "injure, enjoy," putting the *n* with *j* in the second syllable.

Nk, as in *ukunkenketa*, "to ache"; the sound of *nk* in "ink, bank."

Nkw, as in *isinkwa*, sounded as *ngu* in "inquire," putting *n* into the second syllable with *gu*.

Ns, as in *pansi*, "down, under"; like *ns* in "onset, answer," putting *n* into the second syllable with *s*.

Nt, as in *kanti*, "so it is"; *umuntu*, "person"; sounded as *nt* in "want, sent."

Nts, as in *ukuntsala*, or *ukunsala*, "to bend a bow"; sounded as *nts* in "ants."

Nw, as in *umnwe*, "finger"; *unwele*, "hair."

Ny, as in *umnyaka*, "a year"; *ubukanya*, "light"; sounded as *ny* in "Bunyan," putting *n* with *y* into the second syllable.

Nyw, as in *ukuhunywa*, "to be bitten"; not found in English, but made of *ny* and *w*.

Nz, as in *ukwenza*, "to do"; *ubunzima*, "heaviness"; sounded as *ns* in "tansy," putting *n* with *s*, which has the sound of *z*.

Sh, as in *pesheya*, "beyond (the river)"; *shuka*, "rub"; *shumayela*, "speak"; *ishumi*, "ten"; sounded as *sh* in "shine, shade." This is a simple elementary sound differing from the sound of both the letters in the combination, whether they be taken either singly or conjointly, as is the case also in English (see *ty*).

Shw, as in *shwila*, "twist"; the sound of *sh* above united with *w*.

Sw, as in *ukuswela*, "to want"; *umsweswe*, "a shred"; sounded as *sw* in "sweet, swing."

Tsk (see *ty*).

Tshw (see *tyw*).

Tw, as in *ukutwala*, "to carry"; *umtwana*, "a child"; sounded as *tw* in "twenty, twilight."

Ty.—This combination has been used to represent a sound or sounds of considerable variation and ambiguity, or unsteadiness. These sounds have been represented also by other characters, either single or compound.

Different Societies in this field have employed different characters or compounds; and the same Society has not always practised entire uniformity, either as a whole or as individuals.

This diversity arises probably, in part, from a difference in pronunciation of some words by different natives and different tribes; thus the words *ishumi*, "ten," and *ihashi*, "horse," as generally pronounced, should be written as above; but, as sometimes heard, should be written as they sometimes have been—*ityumi*, *ihatyi*, or *itshumi*, *ihatshi*.

In illustration of these remarks, we give here several words in Zulu, as written by different individuals and different Societies, giving the word first in English, thus—

- "To say," *ukutyo, ukusho, ukutsho*.
 "To leave," *ukushiya, ukukiya*.
 "To hasten," *ukutyetya, ukutshetsha, ukukeka*.
 "To act basely," *akutyinga, -shinga, -tshinga, -shinga*.
 "To tell," *ukutyela, ukukela*.
 "To sink," *ukutyona, and ukutshona*.
 "To drive away," *ukuxotya, and ukuxotsha*.
 "To speak," *ukushumayela, and ukutyumayela*.
 "To cast away," *ukutyinga, and ukukinga*.
 "Grass," *utyani, and ujani*.
 "Ten," *ishumi, ityumi, ikumi*.
 "Horse," *ihashi, ihaty, ihaki*.
 "Stone," *itye, ike, iki*.

Upon these and similar words we have, from time to time, made observation, with special reference to the subject of orthography, and endeavoured to note, in various ways, as near as possible, the true sounds as they came from the lips of the natives. After taking from these, and others of a like kind, such as may be properly spelt with *sh* (according to our present notation), as *ishumi, ihashi, ukushumayela, &c.*, the remainder may be reduced to three varieties of orthography, or to three classes, as to the particular sounds in question, of which certani words may be taken as specimens, as follows:—

1. *Utyani*, or *ujani*, "grass"; *kityiwe*, or *kijiwe*, "is taken out." The sound of *ty* in these words is nearly that of *t* (*ch*) in the English word "statue." It is also like that of *d* (*dy* or *dj*), as given by some in the word "gradual, assiduous, educate." Perhaps it cannot be described better than to say it is between the sound of the second *t* in "statue," and *d* in "educate," or better still, that it is equivalent to *dj, dsh, or dzh* strongly aspirated (see *J*).

2. *Tyetya* or *tshetsha, tyona* or *tshona, tyinga, shinga, or jinga*, "act basely." The sound of *ty* in these words is nearly that of the Spanish *ch*, as heard in "much, church"; or the sound of *tsh* or *tch*, as heard in "nature, virtue."

The sound *ty* is not, however, precisely the same in each of these words. The first (*tyetya*) is taken as the standard or best representative of this class; and in it the sound of *ty* is nearly that of *tsh* or *tch*, while the sound of *ty* in the others (*tyona, tyinga*) is not so sharp.

But, as a whole, this second class of sounds (of *ty*) corresponds to the first class, as *t* to *d*, *tj* to *dj*, or as *tsh* or *tch* to *dsh* or *dzh*, as sharp to flat.

3. *Itye*, *tyinga*, "cast away"; *tyela*. The sound of *ty* in these words resembles that of *ty* in the last class, but is still sharper, more aspirate. Hence the sounds that have been represented by *ty* may be called *ty* flat, *ty* sharp, and *ty* sharper; each class, however, having a gradation of its own, which reaches to and unites with its contiguous class. The number of words, however, belonging to the third class, and having a peculiarly sharp sound above many of the second class, are very few.

It is therefore probably inexpedient to represent all these nicer shades and varieties of sounds. It may be sufficiently accurate, more practicable, and more useful, to gather and arrange all the varieties of the series, here described and discussed, under *two* classes.

This may be done without difficulty, by putting into the first class (*dsh* or *dzh*) a few words which, according to the above arrangement, would come into the second; and by including what remains of the second class, and the few of the third class, as above divided, also under one other (the second class), which would be most properly represented by *tsh* or *tch*, or such other characters as may be chosen and adopted to represent *jt*.

Tyw, as in *ubutywala*, "beer"; the first (soft) sound of *ty* (*dsh*) with *w*.

Yw, as in *ukushiywa*, "to be left"; not found in English, nor easily described, though the letters *yw* are used as nearly as possible in their common value.

Zw, as in *ukuzwa*, "to hear"; *ilizwe*, "country"; *izwi*, "word." This sound is not found in English, though its corresponding sharp sound, that of *sw*, is common, as in "sweet, swear."

The true sound of *zw* may be produced from *su* by changing the sound of *s* into that of *z* in such words as "assuage (*azzwage*), and "suaviter," (*zwaviter*) &c.

5. *Clicks*.

The *clicks* (clucks or clacks) are a kind of sound unknown as a part of language except in Southern Africa, and of such a peculiar nature that a foreigner finds it difficult to make or describe them. Indeed, they can be made correctly and with ease, and properly combined with other contiguous sounds, only by a native, and be known with accuracy to a foreigner only by hearing them. But they may be described sufficiently well for the purpose before us.

The clicks may be divided into three general classes, according to the organs chiefly employed in making them, viz. the *dental*, the *palatal*, and the *lateral* click.

The *dental click* is made by placing the tongue firmly upon the front teeth and withdrawing it suddenly with a suction. The sound may be made by a European to attract the attention of a pet animal, or by the fondling mother to make her infant smile, taking care to employ only the tongue and front teeth and not the lips; or again, by an effort to remove with the tongue some foreign substance from between the front teeth by suction. The letter *c* has been used to represent this click, as in *icola*, "debt;" *ukucita*, "to destroy."

The *palatal click* (*q*) is so called from its being made by pressing the tongue closely upon the roof of the mouth and withdrawing it suddenly, so as to produce a sharp, quick noise, a *smack*, *clack*, or *click*, as in *qa*, "no"; *qina*, "be fast"; *iqawe*, "a brave man."

The *lateral click* is so called from its being made by the tongue in conjunction with the side (double) teeth, as in *xapa*, "lap" (as a dog); *ixiba*, "watch-house": a sound quite resembling this in some of its simpler forms is often made by the rider to urge on his horse.

Each general class of clicks has at least three slight modifications, which, according to the kind of modification, may be called the *nasal click*, the *guttural click* and the *naso-guttural click*.

These several modifications have been represented, at least to some extent, by prefixing the character significant of the modification (*n*, *g*, and *ng*), to the several characters (*c*, *q*, and

x), significant of the simple click, as in the following examplss :—

Simple Click.	Nasal Click.	Guttural Click.	Naso-guttural Click.
c ca cita icala	nc ncenga	gc gcwala gcina	ngo ungcwengcwe ungcweda
q qa qina qala	nq nquma unqoqwane	gq gqabuk a gququza gqula	ngq gingqiza ingqe
x xapa ixiba	nx nxanela inxeba nxada	gx gxotya gxilisa	ngx umungxiba

What are here called modified clicks are but varieties of the respective classes of what are called simple clicks, and should be regarded, not a combination of sounds by the addition of a new sound, but another form of the same sound, or rather a new monosound, moderately varying from the principal sound called the simple click,—the simple click being called so, more from its being a common head of the class, or a rallying centre, than from its being any more of a monosound than what are called the modified clicks.

If, then, some simple character be used to represent the simple clicks, and some slight modification of that character by a diacritic mark be used to represent the modified clicks, the orthography of the language will be simplified, and the ground of some dispute be removed as to whether the modification precedes or follows the simple click, inasmuch as it will appear at once that the modification is *in*, and neither before or after the click. But the symbols, both principal and modified, for the different kinds of clicks, will be suggested hereafter, though the final choice or suggestion as to what may be the most appropriate symbols, for these as well as other sounds, is left of course to the ultimate and general Committee.

The only proper combination of consonants with clicks, according to this view, is that in which the different varieties

are sometimes followed by *w*, as in *cwila*, "dive"; *gcwa'a*, "fill"; *ungoqwane*, "snow"; though, according to past and present orthography, all the *nasal*, *guttural*, and *naso-guttural* clicks have consonants prefixed to the character chiefly significant of the click.

There is some fluctuation in the use of the clicks, especially in some words and among different tribes: some say *binga*, others *binca*, "bind"; some say *xuga*, others *quga*, "be loose"; at one time *ca*, at another, *qa*, "no."

At one time we seem to hear *nggoka*, at another, *ggoka*, and at another, *goka*, "dress"; *ngqiba*, *ggiba*, or *qiba*, "close up." But the fluctuation is not very great: the same kind also is sometimes observed among the consonants and vowels.

Many of the words in which the clicks are found seem to be *onomatopes*; as, *qabula*, "snap"; *cocoma*, "hop"; *cinsa*, "spirt"; *coboza*, "crush"; *cokozela*, "parley"; *congozela*, "hobble"; *ubucwazicwazi*, "splendour"; *ukucwazimula*, "to be bright"; *cumbacumba*, "tickle"; *amaqabuqabu*, "finery"; *qaga*, "rip"; *qagamba*, "ache, throb"; *qagazela*, "shiver, tremble"; *eca* or *eqa*, "jump"; *ugogogo*, "the trachea"; *qova*, or *xova*, or *xuva*, "mix," (as mortar); *xoxa*, "converse together"; *qunquta*, "shake out"; *quqa*, "trot"; *xapa*, "lap," (as dogs and cats); *xokozela*, "make a tumult"; *conisa*, "shake up"; *cofoza*, "crush"; *cataza*, "pour out," (as of a bottle); *xapazela* or *xapaza*, "bubble or boil," (as a pudding); *xegaxega*, "totter, go tottering"; *xuma*, "prance, nestle."

6. Gutturals.

The guttural sounds, as they are called, in the Zulu language, are somewhat frequent and various. The different varieties or shades may be reduced to three classes, which cannot, perhaps, be better designated than by calling one the *soft continuous*, another the *hard continuous*, and the third the *explosive* guttural.

The two former have been heretofore represented by the letter *r*, and the latter sometimes by *r* and sometimes by *k*. None of them occur, however, in the English language, and but one of them in any European tongue.

The two latter—the hard continuous and the explosive cannot be pronounced by a foreigner. The soft-continuous guttural resembles a strongly aspirated *h*, the aspiration, however, being back in the throat, and not in the palate or vault of the mouth. It is said to be the same as the Dutch *g*, as in *gemeente*, *greout*. But there are different shades or degrees even of this soft guttural. In some words the aspiration is scarcely more than that of the ordinary English *h*, as *unorora*, “baboon,” or *unohoha*; *umroro*, “a cavern.” But in *rola*, “lead,” *rabula*, “drink,” &c., it is stronger.

The sound of the hard continuous guttural, and the manner of making it, are not easily described. It consists of a rough, forcible expulsion of the breath, sharply modified by a tremulous motion of the epiglottis, as in the words *rara*, “eat greedily,” (as a cow in the garden, or a thief stolen food in constant fear of being caught); *raqa*, “surround”; *rudula*, “drag.” This harsh continuous guttural is thought to resemble the Hebrew Hheth (ח). If, then, we reckon the Hebrew He (ה) as equivalent to the English *h*, we shall have He (ה) to Hheth (ח) as *h* to the hard continuous Zulu guttural.

But if we reckon the English *h* as between the Hebrew He and Hheth, we may say, as *He* is to *h*, so is *h* to *Hheth*. And again, if we may reckon the soft guttural as intermediate to the hard and the English *h*, we shall have *h* to the soft guttural as the soft is to the hard. But the laws of mathematics do not apply with much precision or profit to phonetics.

The other guttural, or group of gutturals, called *explosive*, is still more difficult to describe and make. It differs from the hard continuous by having less of the aspirate and more of the guttural, and seems to be made by contracting the aperture of the throat, shaping the organs of speech as if to utter *cl* in “clown,” and giving the breath a very compressed and forcible expulsion.

The root of the sound seems to be that of *k*, *kh*, or *kl*, commenced firmly and far back at the root of the tongue, urged and opening forward so as to break out into an explosive utterance with an abrupt termination.

The number of words containing this sound are few, perhaps no more than ten or a dozen in all. Among them are

ukureza or *ukukleza*, "to milk into the mouth"; *ukukweba*, or *ukureba*, or *ukukheba*, "to tear as a lion the flesh of its prey"; *umrezo* or *umklezo*, "the bush or switch of the tail." Some of these words seem to be onomoto-poetic; so do some of the words which contain the continuous guttural; as, *rara*, "eat fast and greedily in a crunching manner"; *razula* and *rebula*, "tear"; *rebeza*, "drive away locusts by a rustling, rattling noise"; *irolo*, "roughness"; *ronqa*, "snore"; *roza*, "gurgle, bubble"; *ratyazela*, "rustle," (as ripe waving grain in the wind).

Since the foregoing was written, the following remarks on some of the more important and difficult sounds of the Zulu language have been received from the Rev. J. L. Dohne, a German, and one of the Committee of the Am-Zulu Mission on uniform Orthography.

The remarks are so evidently original and valuable, that we beg to insert them here, as a brief discussion, review, and confirmation of the subject before us. We copy them entire, beginning with

"Dentals.

Soft.	Sharp.
<i>j</i> as in <i>jeza</i>	<i>tsh</i> or <i>ty</i> as in <i>tyetya</i>
<i>sh</i> .. <i>shiya</i>	<i>ts</i> <i>intselo</i>
<i>z</i> .. <i>zala</i>	<i>s</i> <i>sita</i>

"Aspirates.

1. Soft, 'hl as in *uku-hla*.
2. Sharp, 'hl as in *ukwe-hla*.
3. Palatine guttural, *kl*, as in *umgokla*

"In articulating the first two, 'hl and 'hl, the tongue, in a flat position, touches the palate, and an aspiration is made between the tongue and palate. The sound is the same as *ll* in Welsh, in the appellation Lloyd. The same sound, a report has stated, is found also in Sanscrit, and the original pronunciation of the Hebrew *ו* (Theth) was very likely quite the same as in our case.

"The sound represented by *kl* is a peculiar and a difficult

mixture of palatine and guttural power. In articulating, it sounds almost as a lateral click, for the flat tongue is moved as in making a guttural, and moves forth against the palate in a throwing way.

“Persons who suffer of cholic (colic) sometimes make such a sound when throwing up from the stomach.

“ *Clicks.*

1. Dental—1, *c*; 2, *gc*; 3, *nc*; 4, *ngc*; in *cima*, *gcina*, *ncala*, *ngcwanga*.
2. Palatal—1, *q*; 2, *gq*; 3, *nq*; 4, *ngq*; in *qala*, *gquka*, *nqaba*, *ngqoka*.
3. Lateral—1, *x*; 2, *gx*; 3, *nx*; 4, *ngx*; in *xala*, *gxutya*, *nxusa*, *ngxangxa*.

“In articulating *c*, the point of the tongue is placed against the upper front teeth, touching but slightly the under teeth, and whilst the jaws are moved a little from each other, the tongue is drawn from the teeth as if it were in a sucking manner.

“In some parts of Europe it is a custom that people, when an accident of a serious nature is related to them, express their sympathy by this very sign.

“*G* added, modifies the original sound so as to make it flatter. *N* adds but the nasal sound; *ng* turns it still flatter. In articulating *q*, the tongue, in a flat position, is fixed *against* or rather *in*, the hole of the palate, and, as if sucking at it, clicks down with some power.

“There are several signs in common life similar to this click. Little children, when eating something sweet or sticky, frequently produce such clicks.

“This *Q* class varies in the same manner as the *C* class: it is, however, easier to be learned.

“To articulate *x* properly costs great pains and a great deal of practice. It is made by keeping the jaws a little from each other whilst the tongue is clicking against the laterals, just as one makes a noise by sucking at his teeth. It is modified according to the same rules as the preceding classes.

“Properly speaking, we can hardly call the click by the name of consonants, or attribute to them the same power.

"They are rather a mixture or part of some sound that is immediately connected with a following vowel, and nearly all appear to have originated from a tendency to express agreeable or disagreeable feelings by signs. In them we find a *language of signs*. Take, for instance, *ncela*, "suck," as (a child); *ncenceta*, "click for calling a dog"; *ncinza*, "pinch the flesh"; *qaga*, "cut the skin," (as to cup, tear off, rip, tattoo); *qatsha* or *qatya*, "gasp or struggle," (as a dying animal); *qopa*, "cut notches, tickle the nose and draw tears"; *qiqazela*, "run and make a bustle."

"Gutturals.

There are two gutturals which have been represented by the letter *r*. The one may be called the soft guttural, though it is of a broader sound than the German *ch* in *macht*. It corresponds more to the gutturals, in the Dutch language, *ch* and *g*, as in "Christian," and in "God, goods," &c.

"The other is a peculiar, ringing, harsh sound: it is made by contracting the throat, and then making a sound with the throat as if one were choking; thus, in *rweba*, *rara*, &c. The original pronunciation of the Hebrew ר (Rhes) may come nearest to it."

According to the foregoing discussion and review, we find the sound of the Zulu language, and the signs heretofore used for them, to be chiefly as follows:—

I. Vowels.

Long.	Short.
1. <i>a</i> as in "father," <i>umame</i> .	1. <i>a</i> as in "dogma," <i>umsa</i> .
2. <i>e</i> .. "prey," <i>wena</i> .	2. <i>e</i> .. "let," <i>itye</i> .
3. <i>i</i> .. "ravine," <i>mina</i> .	3. <i>i</i> .. "pit," <i>inkosi</i> .
4. <i>o</i> .. "note," <i>uboya</i> .	4. <i>o</i> .. "none," <i>uyihlo</i> .
5. <i>u</i> .. "pool," <i>ingubo</i> .	5. <i>u</i> .. "full," <i>insimu</i> .

II. *Diphthongs.*

1. *ai* as in "aye, pine," *ai, hai, uncapai, ugwai.*
2. *ao* *unyao, indao.*
3. *au* .. "now, house," *hlaula, gaula.*
4. *eu* *imbeu.*

III. *Single Consonants.*

- | | |
|---|---|
| 1. <i>b</i> as in "but," <i>ubaba.</i> | 11. <i>p</i> as in "pin," <i>pila.</i> |
| 2. <i>d</i> .. "did," <i>udade.</i> | 12. <i>r</i> .. <i>ukristu.</i> |
| 3. <i>f</i> .. "fate," <i>fana.</i> | 13. <i>s</i> .. "us, saint," <i>si,</i>
<i>umsa.</i> |
| 4. <i>g</i> .. "go, log," <i>igama.</i> | 14. <i>t</i> .. "tide," <i>tina.</i> |
| 5. <i>h</i> .. "hat," <i>hamba.</i> | 15. <i>v</i> .. "vine," <i>vela.</i> |
| 6. <i>j</i> .. "jar," <i>jubula.</i> | 16. <i>w</i> .. "way," <i>wena.</i> |
| 7. <i>k</i> .. "keep," <i>kodwa.</i> | 17. <i>y</i> .. "yes, you," <i>yala.</i> |
| 8. <i>l</i> .. "love," <i>londa.</i> | 18. <i>z</i> .. "zeal," <i>zona.</i>
<i>ukuza.</i> |
| 9. <i>m</i> .. "man," <i>mina.</i> | |
| 10. <i>n</i> .. "no," <i>neta.</i> | |

IV. *Combinations of Consonants.*

1. *dw* as in "dwarf," *kodwa.*
2. *gw* .. "language," *igwinya, gwaba.*
3. *hl* soft (*dhl*) as in *ukuhla.*
4. *hl* hard, aspirate (*thl*) as in *hlala* (sit)
5. *hlw* soft (*dhlw*) as in *umhlwai, umhlwazi.*
6. *hlw* hard (*thlw*) as in *ukuhlwanyela.*
7. *jw* as in *ijwabu, umjwacu.*
8. *kl* .. *klapaklapa, umgokla.*
9. *kw* .. "queen," *kwela, ukwanda.*
10. *lw* .. *ukulwa, isilwane.*
11. *mb* .. *ukumba, hamba.*
12. *mf* .. *umfumfu, abamfama.*
13. *mhl* .. *ubumhlope.*
14. *mk* .. *ukwamkela.*
15. *ml* .. *ukwamleka, zamla.*
16. *mn* .. *ubumnandi.*
17. *mny* .. *ubumnyama.*
18. *mp* .. "lamp," *insumpa, inswempe.*
19. *ms* .. *gomso* or *gomuso, umsa* or *umusa.*
20. *msh* .. *ukukumsha* (see *sh* and *ty*).

21. *mt* .. *ubumtote*.
 22. *mv* .. *ihhlamvu, emva* or *emuva*.
 23. *nd* .. "hand," *ukutanda, penduka*.
 24. *ndw* .. *undwendwe*.
 25. *ny* .. "sing, reading," *isango, ngena*.
 26. *ngw* .. "language," *igwangwa, sengwa*.
 27. *nhl* soft, *n* and *hl*, or *ndhl*, as in *amanhla*.
 28. *nhl* hard, *n* and *hl*, or *nthl*, as in *inhle, amanhlambi*.
 29. *nj* as in *njalo, njani*.
 30. *nk* .. "ink, bank," *ukunkenketa*.
 31. *nk* .. *isinkwa*
 32. *ns* .. *pansi, tonsa*.
 33. *nt* .. "want," *umuntu, kanti*.
 34. *nts* .. "ants," *ukuntsala*.
 35. *nw* .. *unwele, umnwe*.
 36. *ny* .. *umnyaka*.
 37. *nyw* .. *ukulunywa, linywa*.
 38. *nz* .. *ukwenza, nzima*.
 39. *sh* .. "shine, shall," *pesheya, ishumi*.
 40. *shw* .. *shwila*.
 41. *sw* .. "sweet," *swela*.
 42. *tw* .. "twenty," *twala, umtwana*.
- ty* nearly equal to *dsh* and *tsh*, as below.
43. *dsh* (or *dzh*) as in *utyani* or *udshani*, or *ujani*.
 44. *tsh* (or *tch*) as in *tyetya, tshetsha, itye*.
 45. *tyw* (or *dshw*) as in *ubutywala* or *ubudshwala*.
 46. *yw* as in *ukushiywa*.
 47. *zw* as in *ukuzwa, ilizwe, izw*.

V. Clicks.

- | | |
|--|---|
| 1. <i>c</i> as in <i>cita, cima</i> . | 5. <i>q</i> as in <i>gina gala</i> . |
| 2. <i>gc</i> .. <i>gcwala, gcina</i> . | 6. <i>gq</i> .. <i>gqabuka, gquka</i> . |
| 3. <i>nc</i> .. <i>ncenga, ncela</i> . | 7. <i>nq</i> .. <i>nquma, ngaba</i> . |
| 4. <i>ngc</i> .. <i>ungcwengcwe,</i>
<i>ngcwanga.</i> | 8. <i>ngq</i> .. <i>gingqiza,</i>
<i>ngqoka.</i> |
| 9. <i>x</i> as in <i>xapa, xala</i> . | |
| 10. <i>gx</i> .. <i>gxotya, gxutya</i> . | |
| 11. <i>nx</i> .. <i>nxanela, nxusa</i> . | |
| 12. <i>ngx</i> .. <i>umungxiba,</i>
<i>ngxangxa.</i> | |

VI. Gutturals.

1. *r* as in *rola*.
2. *r* or *ṛ* as in *ṛara*.
3. *r* or *ṛ*, or *kl*, *'kl*, as in *ṛiza*, *um'klezo*.

With these Tables of the sounds of the Zulu language and their signs or characters before us, we are better prepared to suggest some changes, insertions, and omissions, which we would recommend in the Zulu alphabet.

1. Let the short sound of the several vowels be represented in vocabularies and elsewhere, when required, by a circumflex over the sign which stands for the corresponding long sound ; thus, *a* long, as in *umame*, and *ǎ* short as in *umsǎ*; *e* long as in *wetu*, and *ě* short, as in *ilizwě*, &c.

2. If, in some words, or in some dialects, it be thought necessary that each vowel of the several diphthongs should be sounded with a peculiar distinctness and separation, a diæresis may be used, thus, *ai̇*, *ai̇i̇*.

In the Zulu language each of the vowels in the several diphthongs should ordinarily have a good degree of distinctness and separation given it in enunciation, and this should be considered the rule in Zulu, even without the diæresis.

3. If the letter *j*, *J*, be used, as it has been by us and some others, in the English value of that letter, modifications of it might be made by marks attached to it, to represent several sounds, more or less closely related to it, as that, or some of those, of *ty*. But if *j* should not be so used, then some other (simple) character will be required in place of it, which might perhaps be modified to express the related sounds referred to. The same principle or remark applies to other letters or sounds, and, indeed, to the whole scheme of alphabetical signs.

But the choice of signs, together with many other things, must be left in a great measure to the taste and judgment of the general Committee, when they shall have all the different representations, facts, and sounds before them.

4. The propriety of attempting to use *r* in the English sense, and of placing it with its English value in the Zulu alphabet, must depend much upon the course that should be pursued in rendering or translating foreign proper names

which contain that letter (*r*) into the Zulu. If such foreign names should retain the letter in Zulu with its English value, then it should enter into the alphabet with that value, and no other. But if such names may drop that letter, or substitute *l* in place of it, then it (*r*) may not be required for that (English) sound in Zulu, and might perhaps be used for some other sound, as one of the gutturals, as heretofore. To aid in deciding this point, it may be noticed again in this place that the sound of the English *r* is not found in the Zulu or Kafir language, and it is quite impossible for the people to utter it without much effort and training. They give the sound of *l* in place of *r*. And yet this same sound of *r* is very common in the Sechuana, one of the neighbouring and cognate dialects of the Zulu and Kafir.

5. In respect to the combination of consonants—those sounds which have been represented by two or more letters combined—it is difficult to say what course should be pursued.

It is not easy (for some at least) to determine at once with certainty in all cases, as to what are and what are not purely single, simple, elementary sounds. And when this point is settled, there is still another as to the comparative advantages, on the one hand, of representing each simple single sound (not to say some compound sounds) by a single (uncompounded) character, and of the advantages, on the other hand, of representing some of these sounds by two or more characters already in use, each for a specific purpose of its own, by their being each so modified as to lose a part or all of their original value, and so blended as to become unitedly significant of another entirely different sound.

To weigh properly all the considerations for and against each of these methods, and select the best, or so unite the two in a given system as to furnish the best method, all things considered, requires an acquaintance with the whole science of phonology and of mind, as well as with the signs of sounds best suited to the mind and most feasible, such as few possess.

Of the above forty-seven consonantal combinations, the 8th, *kl*, the 14th, *mk*, the 19th, *ms*, and the 34th, *nts*, are of

doubtful necessity. *Kl* occurs in only a very few cases, and the sound may perhaps be classed under hard *hl*; *ms*, and perhaps some other examples of *m*, followed by a consonant, may be, and often are, separated by inserting *u* between them; thus, *gomuso* for *gomso*, *umusa* for *umsa* (see combinations beginning with *m*. *Nts* is sometimes written *ns*, as *ukunsala* or *ukuntsala*, *pansi* or *pantsi*. Of the remaining combinations, some represent but very imperfectly, or even erroneously (especially if we regard the values of the components), the sounds for which they stand. The 3d and 4th, *hl*, and the several combinations of the same, as in the 5th and 6th, 13th and 27th and 28th examples, also the 43d (*dsh*), and 44th (*tsh*), and 45th (*dshw*), are all of this class, where the sounds are imperfectly or erroneously represented by the characters employed, that is, if the component characters are to be supposed to retain any considerable portion of their original proper value.

Some of the sounds and signs for which we would recommend new signs, and the kind of signs which we would suggest, are the following :—

Of Combinations.

For No. 3, *hl* soft, substitute L with two dots under it, or with a short bar across it.

For No. 4, *hl* hard, substitute L with one dot under it.

For No. 25, *ng*, substitute a character made by uniting the two letters *n* and *g*, and making but one letter by taking parts of the two; or the common *g* with a bar across or above it.

For No. 29, *nj*, substitute one character made from *n* and *j* by taking parts of the two and combining them. This change may be thought inexpedient: the combination does not occur often.

For No. 39, *sh*, substitute Σ, or a long *s* (*ʃ*) much like the old-fashioned long *ʃ*; or the common *s* with a dot or a bar above or below it.

For No. 43, *dsh*, use J with a short bar across it.

For No. 44, *tsh*, use G, g, or ç French, or J with a mark of the Greek rough breathing attached; or a modified C as above; or the French c with cedilla; or a kind of inverted h as in the Russian alphabet.

Of Gutturals.

For No. 1, the soft-continuous guttural, use H with a bar across it.

For No. 2, the hard continuous guttural, use R with a dot or a bar under it.

For No. 3, the very rough explosive guttural, use 'k, i.e. k with the rough breathing prefixed, or with a bar across it.

Or :

For No. 1, use r; for No. 2, ṛ; and for No. 3, use 'k.

Of Clicks.

For the simple clicks *c*, *q*, and *x*, use, as before, the same letters.

<i>c.</i>	<i>p.</i>	<i>x.</i>
For (modified) <i>gc</i> use <i>ċ</i>	For <i>gq</i> use <i>ḡ</i>	and for <i>gx</i> use <i>ḡ</i>
For .. <i>nc</i> .. <i>ñ</i>	For <i>nq</i> .. <i>ṅ</i>	.. <i>nx</i> .. <i>ṅ</i>
For .. <i>ngc</i> .. <i>ñ</i>	For <i>ngq</i> .. <i>ṅ</i>	.. <i>ngx</i> .. <i>ṅ</i>

Instead of using the letters *g*, *n*, and *ng* before the simple clicks to indicate the several modifications of them, put over the several letters used for the several simple clicks a dot for *g*, a bar for *n*, and two dots for *ng*.

Notes on the foregoing substitutions and signs.

1. If some of these new characters, or old characters modified, have been introduced into other African languages to represent other sounds than those for which they are above recommended, that of course would be an objection to their being used as above proposed, at least while they should continue to be used elsewhere in a different sense.

2. Should some new character, other than those here recommended, have been introduced into any of the African languages to represent a sound for which we would use, and have recommended, some new character, that would be a reason why that new character, already in use elsewhere, should be employed in Zulu also, to represent the same sound here which it elsewhere represents.

It is thought that *L*, *l*, one of the characters proposed for No. 3 *hl* soft, has been introduced into the Bakēle dialect to represent a sound (that of *l* and *th*) which differs from that of *hl* soft in Zulu; and if so, that would be an objection to using it for *hl* in Zulu.

It is thought, also, that *l* with a dot under it, for hard *hl* (*thl*) and *l* with two dots under it, for *hl* soft (*dhl*) may have seemed to some of the Missionaries in Kafirland very suitable representations for those sounds. And if they, or any of them, or others, have represented said sounds by said characters, or have the means already at hand for so doing, that would be a reason for using these characters for these sounds in Zulu.

A new letter, being fragments of *n* and *g* combined, has been adopted, in some systems of orthography to represent the sound of *ng* as often heard in Zulu, as in the English words "king, singing," and if so, that might be a reason, especially if it is thus used in some parts of Africa, for using that character for said purpose in Zulu. The same remarks apply to *Σ*, *f*, for *sh*, &c.

J, with a bar across it, is recommended for *dsh* (*ty*) on the ground that *j* may continue to be used, as heretofore, in Zulu and some other African languages, as it is used in English; and on the further ground that the sound of *ty* = *dsh* (or *dzh*) in *ntyani*, &c., is closely allied to the sound of the English *j*, *J*.

And, again, *J*, double dotted, is recommended for *tsh* (*ty*), as in *tyetya* (*tshetsha*), on the ground of the relation of this sound to the foregoing sounds represented by *j* and *J*. It is thought, however, that this sound of *tsh* has been already represented by some (as A. J. Ellis, J. Pitman, &c.) by a new letter; and by others (as the French Missionaries among the Basutu) by *ç* (French *ç* with cedilla); and if so, that might be a good reason

for using one of said characters (as ç) for the above sound in Zulu.

3. If others (Missionaries, &c., in Africa,) think it important to have new characters for sounds common to their and our (African) languages, for which sounds we have recommended no new characters, we might like to introduce them into the Zulu Alphabet to represent the same sounds in Zulu, in place of some clumsy combinations which would still remain in our alphabet after the changes which we propose at the present time are made.

4. The Committee to whom the whole subject is referred, may think that many more changes than those above proposed should be made, and new simple (uncompounded) signs be used in place of many of the compound characters now employed; and if so, we would gladly accept those more simple and appropriate signs in place of the ugly compounds.

5. It may be thought expedient to represent the (simple) clicks by other signs than those heretofore employed (c , q , and x), and reserve these letters for some other purpose, or dismiss them from the alphabet. If so, it will doubtless seem desirable that the characters used for the modified clicks should have a close resemblance to those used for the simple clicks, as close, at least, as c dotted, c barred, and c double dotted, have to c , as in the characters suggested for the clicks.

6. Much that pertains to the use of diacritic marks, or the shape, &c., of the type for new signs, must doubtless be referred to the lettercutter, or typefounder, or the experienced printer—an artist capable of judging of the beauty and utility of a new sign, or the modification of an old one.

Some of the signs above proposed may be found incompatible with economy and good taste: if so, more consistent and becoming characters should be used instead of them.

According to the foregoing remarks, changes, and suggestions, the following are appropriate and sufficient *alphabetical signs* for the Zulu language:—

<i>Old.</i>	<i>New.</i>
a	1. a
b	2. b
c	3. c

<i>Old.</i>	<i>New.</i>
<i>gc</i>	4. <i>c</i> , with a dot
<i>nc</i>	5. <i>c</i> .. bar
<i>ngc</i>	6. <i>c</i> .. two dots
<i>d</i>	7. <i>d</i>
<i>e</i>	8. <i>e</i>
<i>f</i>	9. <i>f</i>
<i>g</i>	10. <i>g</i>
<i>ng</i>	11. <i>ng</i>
<i>h</i>	12. <i>h</i>
Soft guttural <i>r</i>	13. <i>h</i> , with a bar (or <i>r</i> , <i>rola</i>)
<i>i</i>	14. <i>i</i>
<i>j</i>	15. <i>j</i>
<i>nj</i>	16. a new letter (part of <i>n</i> combined with <i>j</i>)
(<i>dsh</i>) <i>ty</i>	17. <i>j</i> with a bar
(<i>tsh</i>) <i>ty</i>	18. <i>j</i> with two dots
<i>k</i>	19. <i>k</i>
Explos. guttural <i>k</i> or <i>r</i>	20. <i>k</i> dotted or barred
<i>l</i>	21. <i>l</i>
(<i>dhl</i>) <i>hl</i>	22. <i>l</i> with two dots under it
(<i>thl</i>) <i>hl</i>	23. <i>l</i> with one dot under it
<i>m</i>	24. <i>m</i>
<i>n</i>	25. <i>n</i>
<i>o</i>	26. <i>o</i>
<i>p</i>	27. <i>p</i>
<i>q</i>	28. <i>q</i>
<i>gg</i>	29. <i>q</i> with one dot over it
<i>nq</i>	30. <i>q</i> .. a bar over it
<i>ngq</i>	31. <i>q</i> .. two dots over it
English <i>r</i>	32. <i>r</i>
Hard guttural <i>r</i>	33. <i>r</i> with one dot under it
<i>s</i>	34. <i>s</i>
(<i>ty</i>) <i>sh</i>	35. <i>f</i> , or <i>s</i> dotted
<i>t</i>	36. <i>t</i>
<i>u</i>	37. <i>u</i>
<i>v</i>	38. <i>v</i>
<i>w</i>	39. <i>w</i>
<i>x</i>	40. <i>x</i>
<i>gx</i>	41. <i>x</i> with one dot over it

Old.	New.
<i>nx</i>	42. <i>x</i> with a bar over it
<i>ngx</i>	43. <i>x</i> .. two dots over it
<i>y</i>	44. <i>y</i>
<i>z</i>	45. <i>z</i>

According to the above, the whole number of *signs* or letters convenient and sufficient for working the Zulu language is *forty-five*.

According to the foregoing examination and remarks, the following are the *fundamental sounds in the Zulu language*:—

I. Vowels.

1. *a* as in "father", *umame*
2. *a* .. "dogma", *umsa*
3. *e* .. "prey", *wena*
4. *e* .. "let", *itye*
5. *i* .. "ravine", *mina*
6. *i* .. "pit", *inkosi*
7. *o* .. "note", *uboya*
8. *o* .. "none", *uyihlo*
9. *u* .. "pool", *ingubo*
10. *u* .. "full", *insimu*

II. Diphthongs.

1. *ai* as in "pine", *ai*, *hai*
2. *ao* *umyao*
3. *au* .. "now" *hlaula*
4. *eu* *imbeu*

III. Consonants and Gutturals.

1. *b* as in "but", *ubaba*
2. *d* .. "did", *udade*
3. *f* .. "fate", *fana*
4. *g* .. "go, log", *igoma*
5. *ng* .. "singing", *ngena*
6. *h* .. "hat", *hamba*
7. *h* barred, as Dutch *g* in
"good", *rola*, *kola*
8. *j* as in "jar", *jabula*

9. *nj* as in "njalo"
10. *j* barred, *njani* (*utyani*) *dsh*
11. *j* with two dots, "church,"
jeja (*tyetya*) *tsh*
12. *k* .. "keep", *kodwa*
13. *k* dotted, *koeza* (rough ex-
plosive guttural)
14. *l* as in "love", *londa*
15. *l* with two dots, *ukula*
(*ukuhla*) *dhl*
16. *l* with one dot, *lala* (*hlala*)
"sit", *thl*
17. *m* .. "man", *mina*
18. *n* .. "not", *neta*
19. *p* .. "pin", *pela*
20. *r* .. "rose", *ukristu*
21. *r* dotted "rara," (hard con-
tinued guttural)
22. *s* .. "saint", *si*, *umsa*
23. *s, f* .. "shall", *isumi*
(*ishumi*)
24. *t* .. "tide", *tina*
25. *v* .. "vine", *vela*
26. *w* .. "way", *wena*
27. *y* .. "you", *yala*
28. *z* .. "zeal", *zona*

IV. Clicks.

1. *c* as in *cita*, *cima*

2. <i>ċ</i> as in <i>ċwala</i> (<i>gċwala</i>)	12. <i>mk</i> as in <i>ukwamkela</i>
3. <i>ċ̄</i> .. <i>ċenga</i> (<i>nċenga</i>)	13. <i>ml</i> .. <i>zamlā</i>
4. <i>ċ̇</i> .. <i>ċwanga</i> (<i>ngċwanga</i>)	14. <i>mhl</i> .. <i>ubumhlope</i>
5. <i>q</i> .. <i>qina</i> (<i>qala</i>)	15. <i>mn</i> .. <i>ubumnandi</i>
6. <i>q̇</i> .. <i>qabuqa</i> (<i>qbabuqa</i>)	16. <i>mny</i> .. <i>ubumnyama</i>
7. <i>q̄</i> .. <i>quma</i> (<i>nquma</i>)	17. <i>mp</i> .. "lamp", <i>insumpa</i>
8. <i>q̇̇</i> .. <i>qoqa</i> (<i>ngqoqa</i>)	18. <i>mf</i> .. <i>gomfo</i>
9. <i>x</i> .. <i>xada</i> (<i>xala</i>)	19. <i>mt</i> .. <i>ubumtote</i>
10. <i>ẋ</i> .. <i>xotyā</i> (<i>gxotyā</i>)	20. <i>mv</i> .. <i>emva</i>
11. <i>x̄</i> .. <i>xanela</i> (<i>n̄xanela</i>)	21. <i>nd</i> .. "hand", <i>tanda</i>]
12. <i>ṡ</i> .. <i>ṡaṡa</i> (<i>nyṡanyṡa</i>)	22. <i>ndw</i> .. <i>undwendwe</i>
	23. <i>nk</i> .. "ink", <i>nkenketa</i>
	24. <i>nk̄w</i> .. <i>isinkwa</i>
	25. <i>n̄l</i> .. <i>amanla</i> (<i>ndhl</i>)
	26. <i>n̄l̇</i> .. <i>inle</i> (<i>nthl</i>)
	27. <i>ns</i> .. <i>tonsa</i>
	28. <i>nt</i> .. "want", <i>umuntu</i>
	29. <i>n̄w</i> .. <i>unwele</i>
	30. <i>ny</i> .. <i>umnyakr</i>
	31. <i>nyw</i> .. <i>lunywa</i>
	32. <i>nz</i> .. <i>nzima</i>
	33. <i>sw</i> .. "sweet", <i>swela</i>
	34. <i>fw</i> .. <i>fwila</i> (<i>shw</i>)
	35. <i>tw</i> .. "twenty", <i>twa/a</i>
	36. <i>yw</i> .. <i>shiywa</i>
	37. <i>zw</i> .. <i>ukuzwa</i>

V. Combinations.

1. <i>dw</i> as in "dwarf", <i>kodwa</i>	
2. <i>gw</i> .. "language", <i>gwaba</i>	
3. <i>ng</i> , <i>NG</i> as in "ringing", <i>ngena</i>	
4. <i>ju</i> as in <i>ijuabu</i>	
5. <i>jw</i> .. <i>ujwala</i> (<i>utywala</i>)	
6. <i>kw</i> .. "queen", <i>kwela</i>	
7. <i>lw</i> .. <i>ululwa</i>	
8. <i>lẇ</i> .. <i>umlwaza</i> (<i>dhlw</i>)	
9. <i>lẇ̇</i> .. <i>lwaulyela</i> (<i>thlw</i>)	
10. <i>mb</i> .. <i>hamba</i>	
11. <i>mf</i> .. <i>umfumfu</i>	

From the foregoing observations, it appears that the *fundamental sounds* in the *Zulu language* are—

1. Vowels	10
2. Diphthongs	4
3. Consonants and Gutturals	28
4. Clicks	12
5. Consonantal Combinations	37

Fundamental sounds, *Total* 91

We have now done with the phonology and alphabet of the Zulu language.

But the use and place of capital letters in writing Zulu

proper names, and the transferring of proper names from Scripture and other languages into Zulu, and the joining and disjoining of words, are all subjects which are attended with more or less difficulty in writing and printing Zulu, and which come properly under the head of orthography. They are now under consideration, and remarks upon them may be expected soon.

In behalf of the Committee of the American Zulu
Mission on uniform orthography,

LEWIS GROUT.

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